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AUTHOR	McKee, Charles J. L., Ed.; Weil, Linn E., Ed.
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ABSTRACT

This staff guide is directed to individuals or groups who are interested in the establishment and operation of child care centers for disadvantaged children and includes discussions of staff schedules, duties, supplies, health and safety. The first section deals with daily routines and discusses care for infants, toddlers, pre-school and school-age children. Helpful food service ideas are provided, including check lists and enumeration of supplies needed. The second section describes specific activities such as a rhythm band, painting, cooking, group games, science, and stories. A list of materials needed, step-by-step instructions, and age group recommendations are given for each activity. (AJ)

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A Staff Guide To Operating Child Care Centers For The Disadvantaged

Site
Facilities
Staff
Schedules
Health and Safety
Babies and Toddlers
Pre-School Care
School Age Care
Food Service
Arts and Crafts
Science
Activities

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Editors

Charles J. L. McKee

Linn B. Weil

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About This Book

The title of this book should be a challenge to all concerned with the care of disadvantaged children.

"Can I love this place?" is a question which Child Care Center staff members must answer through deeds less than words. The purpose of this book is to help you establish and operate a Center. An answer to the child's question, however, won't be found in these pages. Only you can provide the attention and affection which can change the title from a question to a positive statement: "I love this place and the people here."

FOR CHILD CARE Center administrators, the book provides guidelines for the establishment and operation of Centers and discusses such important items as staff schedules, duties, supplies, health, and safety. Teachers, group leaders and aides will find material dealing with specific problems of child care such as feeding, toileting, naps, games, crafts and activities.

The book is divided into two sections. The first is the "let's get down to business" section and deals with the important, day-to-day routines required for a successful operation. The second section includes helpful hints and advice on painting, carpentry, sewing, games, reading, science and other activities.

YOU'LL NOTICE that the book refers to the director of a Center as "she." This is not intended to exclude men from such a position. It has been found, however, that the majority of Child Care Centers are directed by women.

THIS BOOK was developed from a staff manual originally prepared by a migrant service project in Cortland County, New York—a project administered by the New York State Department of Agriculture and Markets. Although the format has been changed and new materials added, an attempt has been made to retain much of the language of the original manual. It is felt that the style will be easily understood by administrators, teachers, aides and volunteers.

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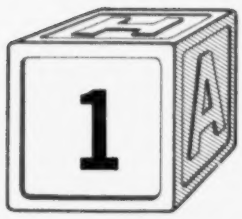
Section I



Child Care Centers

Child Care Centers are established to provide a good fe for children. In order to provide a good life for a hild, it is necessary to be able to understand his be- avior and to meet his needs. The adults who work ith him should know how he uses toys and play aterials and how to help him when he is unhappy and ies or fights. In other words, leaders should learn hat children are really like and why they behave as ey do—then it is possible to help them to grow in the est way. In order to grow, a child needs not only good od and rest, but adults who understand and encourage im to learn the things he should learn at his particular ge.

Here are some of the things children need as part of eir lives at a Cen er:

- A clean, orderly place in which to live and play.
- The challenge and stimulation of sturdy play equipment, of stories, blocks, paints, clay and other creative materials, music and trips.
- The companionship of other children.
- A program which has the same rhythm each day, a regular schedule of quiet play, active play indoors and out, good food, rest, and sleep.
- Adults who understand children and can accept their uncooperative behavior as well as their cooperative behavior with poise and calm.
- Adults who are pleasant and kind but at the same time firm.
- Adults who are sympathetic to children's ways and who appreciate fully that children may need to try and try again, and that they will frequently make mistakes because of their inexperience.
- Adults who enjoy being with children, who can laugh with them and gain enjoyment from their day-by-day successes and discoveries.
- A sense of security, of belonging to a group—appreciation, friendliness and affection in human relationships—opportunity to grow and to succeed, even if only for a short period of time in this particular setting.

In giving children a good life in the Centers, adults re having a hand in the making of better human beings. A good Child Care Center is really a demonstration n living. The first aim should be that all people in the Center get along well with each other. A pleasant, happy, courteous manner toward all is an excellent beginning. Children are quick to sense and to copy the ways of adults whom they like and respect. Many important lessons are caught rather than taught.

Good relations with parents are extremely important. Child Care Centers are not designed to take the place of the child's home. Parents should understand a Center's real purpose, which is to supplement and strengthen the home, not to be a substitute for it.

Site and Facilities

Chances are you are past the point of organizing and financing your Child Care Center and are now seeking facilities for it.

What you choose to use for your Center will depend in part on whether you are privately or Federally-funded and how much money you have at your disposal. You can rent or purchase facilities. They can be part or all of a house, an unused classroom or classrooms in a school, a community center used by others only at night, or anything else feasible which you may think of. Some Centers have been operated from old firehouses, farmhouses, or from a building loft in a large city.

Some considerations to keep in mind when selecting your prospective Center are:

1. Is it conveniently located for both staff and children?
2. Is it close to transportation?
3. Is it located in a residential area or in an industrial area?
4. Is the area safe for people to walk alone?

Before making a definite decision, it would be helpful to speak with some community leaders—bankers, real estate agents, fire and police department officials, your local health department (city or county)—to get some suggestions and also to learn about local health, safety and fire regulations and permits. You should also be sure you will have adequate insurance. One lawsuit can wipe out an entire program.

Your Center should be equipped with:

—an outdoor play area, away from traffic

—adequate heating, light and ventilation

—range with oven
—refrigerator
—kitchen sink with sufficient hot and cold water
—low open shelves for general storage and display of small toys and blocks
—high shelves for teacher's use for storage
—toilets
—sinks
—mirrors over children's sinks (if possible)
—cabinets for storage of supplies, art materials, games, etc.

These are very general guidelines. You will have to determine the specific needs of your Center and make adjustments where needed.

Types of Centers

The number of children in a Center may range from 15 to 100. Ages may range from 8 weeks to 14 years. Small units can be conducted on a combination plan with children of each age group being cared for together. Large Centers can be divided into sub-groups: units for infants, toddlers, pre-school and school-age children.

Staff

The minimum staff suggested for a small Child Care Center includes a director, assistant director, two group leaders, and a dietitian-cook. If a budget permits, a full-time or part-time maintenance man might be included.

Centers without separate administrative units might consider a clerk-typist to handle secretarial chores and bookkeeping. This could be a full-time or part-time position, depending upon the size of the program.

A group leader is a person responsible for a group of children and is, in effect, a teacher. Large Centers may wish to hire teacher aides to assist the group leaders with routine duties. It is advisable to employ teacher aides from the target population served by the Center.

Hours

Some Centers may operate six days a week (Monday through Saturday), while others may operate five days. Hours per day vary according to the location. Those coordinated with summer school programs or operated in school buildings usually open at 7 a.m. and close at 5 p.m.

Because of the length of the day, it will probably be necessary for the staff to stagger its hours or for the members to work on split shifts. For example, the staff member who opens the Center should be the first to leave in the afternoon. The last person to come on duty should close the Center at night, and some staff members may be free during rest time. In this way, everyone will be on duty during the middle of the day when the work load in the Center is usually heaviest.

Each Center should develop its own staff program. It is usually wise to rotate shifts so that each person takes his or her turn at less agreeable hours and receives a fair allotment of free time. However, it is important that leaders do not change groups of children.

The director is responsible for making out the schedule of hours of work for her staff. She should do so in consultation with the staff members in order to respect preferences in so far as this is possible without affecting the work of the Center. The schedule should show exact working hours of all staff members.

Sample Staff Schedules

For Small Centers

Director
6:30 a.m.-2:30 p.m.

Assistant Director
11:00 a.m.—One half hour after the children leave

First Group Leader
8:00 a.m.-2:30 p.m. and as needed in the afternoon

Second Group Leader
12:30 p.m.—One half hour after the children leave

Dietitian-Cook
10:00 a.m.—One half hour after the children leave

Or

Director
6:30 a.m.-2:30 p.m.

First Group Leader
6:30 a.m.-2:30 p.m.

Assistant Director
11:00 a.m.—One half hour after the children leave

Second Group Leader
11:00 a.m.—One half hour after the children leave

(It is understood that all staff members pitch in willingly in any sort of emergency situation, and that the hours outlined above are merely suggestions for possible working arrangements, not fixed hours in the sense of an office job.)

For Large Centers

School Age Staff
6:30 a.m.-2:30 p.m.
12:30 p.m.—One half hour after the children leave

Pre-School Staff
6:30 a.m.-2:30 p.m.
11:00 a.m.—One half hour after the children leave

Baby Room Staff
6:30 a.m.-2:30 p.m.
11:00 a.m.—One half hour after the children leave

Cook-Dietitian
8:00 a.m.-2:00 p.m. and 3:00-4:00 p.m. for cooking duties. She can help with one or more of the groups in the late afternoon when her own work is done.

Staff Duties

Directors and assistant directors. The director and the assistant director are the key persons on the staff and should be responsible for all activities at all times. The director may be in charge of a group of children or may help wherever needed, depending upon individual circumstances, but the assistant director is always responsible for one group of children.

Duties: The director, with the help of the assistant director, is responsible for:

1. Planning and making out staff schedules and planning and content of the play program;
2. Supervision of staff members;
3. Keeping all records (attendance, purchases, etc.);
4. Preparing and distributing all reports;
5. Planning of meals with the dietitian;
6. Buying or approving the purchase of such staples as bread, milk, meat, eggs, fresh vegetables;
7. Setting up the Center, placing equipment, materials, bulletin boards, etc., and planning room arrangements with staff members;
8. Maintaining relations with the community;
9. Meeting visitors;
10. Maintaining pleasant staff relationships;
11. Holding weekly staff meetings.

Routines:

Daily—Check attendance.
Check with dietitian on supplies and menus.
Mark time record for all employees.

Weekly—Order food for the week ahead.
Arrange bulletin board for the current week.

Many of these duties can be delegated to the assistant director. In the director's absence, the assistant assumes all the duties and responsibilities of the director.

Group Leader. The group leader assists the assistant director with the assistant's group of children. The group leader is responsible for carrying out assigned tasks, and as she shows herself capable, becomes increasingly able to supervise the group to which she is assigned independently. She should be cooperative and loyal and should show initiative.

Dietitian-Cooks. The dietitian-cook is responsible for planning meals and for seeing that adequate supplies are always at hand; she collaborates with the director in doing this. She is responsible for the preparation of the morning and afternoon snacks, the noon-day meal, and full care of the kitchen, including washing the dishes used by the children. If the children are staying particularly late, she may be required to prepared supper for them. Later in the afternoon she shares in working with a group of children.

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Guidelines

Here are some guidelines for Child Care Centers.

Program

1. An effective educational program—

   permits the child to develop at his own rate in exploring, experimenting, conversing, thinking, and solving problems;

   helps the child to work and play effectively alone and with others and to value his rights and the rights of others;

   encourages the child to help himself in dressing, washing, eating, working, and cleaning up but gives him support and assistance as he needs them in mastering these tasks;

   provides for many sensory experiences as the basis for learning and as a means of compensating for the child's narrow range of past experiences;

   helps the child sharpen and widen his language skills;

   develops and strengthens the child's physical skills, using large and small muscles;

   provides a variety of activities suitable to every child's development and interests;

   increases the child's opportunities to express inner creative impulses—dancing, painting, etc.;

   invites and strongly encourages parents to visit and take part in the program;

   uses the resources of the community in the program.

2. An appropriate schedule—

   provides a balance between the child's choice of what he will do, with whom he will play and teacher-directed activities such as finger painting or a science project;

   alternates between active and quiet periods;

   shows definite organization and structure but remains flexible, fitting the schedule of the center.

Staff

1. A quality Child Care program—

   requires services of many people with skills in education, medicine, social work, and nutrition;

   employs staff trained in childhood education;

   provides two teachers or one teacher and a trained assistant for every 15-18 children;

   recruits volunteers who are dedicated to the welfare of children and who are willing to commit time and energy in their behalf;

   uses consultants and trained project leaders for a continued training program centering on the problems staff members face as they work with the children.

2. A good Child Care teacher—

   likes and respects children and is enthusiastic, friendly, and patient;

   recognizes differences in children and is observant of each child's development and needs;

is acquainted with first aid;

respects parents and works with them skillfully;

uses help from parents in working for the best interests of each child.

Facilities

1. Adequate Child Care facilities—

meet all fire and health department regulations;

provide equipment and materials that are safe, durable, in good condition, and that promote exploratory and creative play;

offer a positive learning environment for the education program of the enrolled children both indoors and outdoors.

2. Indoor facilities and equipment should include—

space—40 or more square feet of space for each child;

block building area—large and expandable; room enough for as many as eight children to build roads, rivers, bridges, tall buildlings, farms; free enough for some buildings to remain in place overnight; useful for music, dancing, games and floor painting when the blocks are put away;

library corner—ideally, a cozy, quiet place where children look at books, listen to stories, and participate in discussions or word and number games;

dramatic play area—containing household equipment and materials and also office equipment, mechanical materials, and clock sets to be taken apart;

table working area—providing tables and seating for 15 children and 4 adults; close at hand, art supplies, games, manipulative materials, felt and sandpaper, letters and numbers, clay, paper, crayons, scissors, science equipment (such as magnets, magnifying glasses, dry-cell batteries), record player and records (requiring their own table or shelf space);

painting and woodworking area—a place for easels, removable woodworking benches, low saw horses, art supplies and lumber scraps, tools; a piece of linoleum or plastic on the floor will permit easy clean-up;

children's clothing area—small wooden crates (placed on end and supplied with a shelf and hooks) make efficient storage units for children's outdoor clothing;

many Centers have used a group of folding chairs, one for each child, lined up against the wall near the door; others have simply placed hooks along a wall, far enough apart to make dressing comfortable for the children;

storage space for use by the teacher and aides—lockable closets and cabinets for storing first-aid kits, extra books and puzzles, phonograph records, and files containing records about the children and their families.

3. Outdoor facilities and equipment should include—

outdoor space—local conditions will determine many decisions—some Centers will be located where plenty of outdoor play space, with trees, hills, water, rocks and dirt for digging is available; other Centers will have only a concrete playground close at hand;

children in a Center need an outdoor space which affords opportunity for such activities as running, for building with large boxes and planks, for climbing and balancing, for digging in sand or dirt, for riding tricycles and pulling loads in wagons;

particularly for the summer, careful planning of the outdoor space is important because more of the program may be located there than during the winter; many of the activities of the library area and the table work area may be held outdoors;

for hot summer days, a sprinkler or some other form of spurting water is good.

Health and Safety

A discussion of health procedures and safety practices in Child Care Centers must necessarily be very general. The variety of state, county and local health and safety regulations make it impossible to give more than general advice.

Health is an important aspect of any Child Care program for disadvantaged populations. Centers cannot only help keep children healthy but can demonstrate to parents the importance of health to a child's ability to learn. Safety in the Center is important for the well-being of children and staff and for the continued success of the Center. One serious accident can jeopardize a Center by causing the parents and the community to lose faith in the Center's operators and staff.

Before establishing a Center or hiring the teaching or cooking staff, consult with local health officials to learn what regulations you must abide by and for advice about health examinations and routines. Most states will require a health permit or license before the Center can begin operation. Issuance of a permit usually follows an inspection of the Center's physical facilities and staff. Permits can often be revoked if a Center does not maintain high standards of health and safety.

Staff

Even if your locality does not require it, establish a policy requiring each staff member to undergo a thorough physical examination before starting work at the Center. This is particularly important if you plan to draw staff members from the target population.

Children

The procedure will vary from community to community, but arrangements should be made for a physical examination for each child as he enters the Center. Results of this examination should be made available to parents. If a child requires corrective treatment or equipment (glasses, etc.) the Center staff should assist the parents in securing treatment or appliances. Work with public health officials and local welfare offices.

Examinations and health care for children should be on-going. Some Centers rely on a local health clinic for care. In other areas, local physicians have volunteered their services on a rotating basis. Hospitals with staffs of interns may also be a source of medical service and advice. The important point is to have a professional medical person available to the Center at all times (some states or localities will require this before a permit is issued). Some Child Care projects hire a nurse as a permanent member of the staff. If your budget will permit such a staff member, this is an excellent idea. If not, make arrangements to have a nurse on call. This can be in addition to or in place of a doctor. However, a doctor should be available for emergencies.

Daily Inspection

The staff should make an informal inspection of all children when they are brought to the Center each morning. Parents should be asked not to bring sick children. Throughout the day, staff members should be alert to early signs of illness in the children, such as irritability, languor, etc. This daily inspection is described later in this book.

Emergency Medical Care

Staff members should be given an orientation session on health care. At least one member of the staff should be familiar with first aid procedures (local Red Cross chapters can provide this training).

First aid treatment should be limited to minor injuries. If a child has a bruise, abrasion or minor cut, the wounded area should be washed with soap and water and a mild antiseptic should be applied.

If a child becomes sick during the day, he should be excluded from group activity and kept away from other children:

- temperature may be taken when symptoms indicate fever (flush, pain, loss of appetite, etc.);
- a child with a fever should be kept on his cot and quiet.

In the event of a serious illness or accident:

- contact the Center's nurse or doctor immediately;
- inform the Center director who should make transportation arrangements, if necessary, and inform the child's parents;
- in event of accident, apply first aid or call on the staff member trained in first aid; in the event of illness, make the child comfortable while waiting for the doctor or nurse.
- local regulations may require that staff members file a report on the accident or illness; even if there are no such regulations, staff members should be encouraged to file a report, no matter how informal, with the director.

Some Safety Rules

1. Children must never be left alone. A staff member must be present at all times.
2. Children must not be allowed to leave the Center until a responsible person designated by the parent calls for them.
3. Children may not be allowed to take trips in which riding in private cars is necessary.
4. Children must not be allowed to swim or wade in nearby bodies of water.
5. A fence of some type should be erected around free-standing heaters.
6. The outdoor play area must be fenced and free of harmful objects such as bottles, cans, etc.
7. Fire drills should be held regularly and each staff member should be familiar with the fire escape routes.
8. Children must not play in streets.
9. Stairs should be well lighted and a low handrail for children should be provided, if possible.

10. Loose rugs should not be used. Use only rugs which are tacked to the floor in such a fashion that they will not trip children, or use rugs with skid-resistant backs.
11. Floors must be kept free of litter.
12. Beware of scalding water in sinks used by children. Some centers paint the hot water tap red.
13. Wipe up spilled water so there are no slippery spots on floors.
14. Lock harmful supplies in a cupboard that is out of the children's reach.

Baby and Toddler Care

Opening the Center

Assistant directors and group leaders are responsible for cleaning their own rooms and for unpacking and arranging all supplies and equipment.

Bulletin Board

The bulletin board must be in a conspicuous place and supplied with the following information:

1. Current staff schedule.
2. Babies' schedule.
3. Toddlers' schedule.
4. Attendance sheet for the group or groups.
5. Fire drill plan.

Room Guide

1. Storage space must be provided for bedding, powder, oil, and other standard supplies.
2. A covered container must be provided for soiled disposable diapers and another filled with soapy water for dirty dishes and bottles.
3. Paper bags must be supplied for the babies' own diapers, which are to be taken home. If these become soiled before they can be removed, wash them and allow time to dry before placing in a bag marked with the baby's name.
4. Provision must be made for the washing of the staff member's hands after she has cared for each baby and before she goes to another.
5. Wall space or small drying racks must be provided for individual wash cloths and towels.
6. A colored plaything should be tied to each crib.
7. The baby room should be decorated with bright curtains, pictures, and gay colors.
8. Pieces of metal or glass, tied with string so that they sway and make a "clinking" sound in the breeze, may be hung beside windows and doors.
9. Play equipment, such as balls, clothespins, spools, spoons, sand toys, cans with smooth edges, and soft cloth animals should be supplied for the toddlers. They like things they can push and pull, fill and empty, carry and drop.
10. In a separate, fenced-in, outdoor play space for toddlers, basins for water play may occasionally be set up for use on warm days. This space must be thoroughly cleaned and broken bottles, glass, bottle tops, nails, etc. removed.

Preparing Formula

1. After scrubbing hands and cleaning nails, wash all equipment in hot, soapy water. Scrub bottles and nipples inside and out with a brush. Squeeze water through the nipples. Rinse well in clean, hot water and allow to drain dry.
2. Unless otherwise specified, a stock formula consisting of equal parts of water and evaporated milk is to be made.
   (a) Measure required amount of water from faucet into measuring cup and pour into saucepan or pitcher for mixing.
   (b) Scrub top of evaporated milk can with soap suds and rinse top with clean hot water.
   (c) Open milk can, measure out same amount of milk as water used and pour into mixing container. Stir to mix.
3. Pour formula into bottles, using funnel.

4. Fill extra bottles with drinking water.
5. Place nipples on bottle and cover with paper cup. This cover must be placed loosely to allow steam to circulate.
6. Place assembled formula bottles in sterilizer or its substitute, then put in 2 or 3 inches of water.
7. Cover sterilizer with the lid and place on stove to boil.
8. Make note of time when water starts to boil and *boil exactly 25 minutes by the clock.*
9. After boiling 25 minutes, remove sterilizer from the stove. *Do not remove lid. Do not even lift lid* until sterilizer is cool enough to hold hands against the sides.
10. Remove cover from sterilizer and tighten paper cups over nipples and place bottles in refrigerator until ready to use.

Instant Formula

The method of preparing baby formula as described above is rapidly giving way to instant formulas, now preferred by more and more mothers. Although slightly more expensive, these pre-mixed formulas offer more convenience and greater nutrition than evaporated milk.

Some formulas come in powder form and are mixed with water and poured into the bottle.

Others are concentrated liquids, come in cans, and are usually diluted with water.

The most convenient formulas are entirely pre-mixed. One form is packed in cans and is poured directly into the bottle. Another form is available in glass bottles. Simply attach a screw-on nipple and the bottle is ready to use.

These concentrated and pre-mixed formulas contain important vitamins and minerals. They are packaged by many of the best known baby food manufacturers and drug makers and are available at drug and food stores.

Care of Equipment

Bottles should be rinsed thoroughly *immediately* after use and filled with cold water. Rinse nipples immediately after use and be sure that cold water is squeezed through the nipple holes. It is easy to remove traces of formula if it is done immediately, but almost impossible if it has had time to set.

Disposable Bottles

In most Child Care Centers, the parents provide baby bottles. Centers which wish to use their own bottles or wish to have "spares" on hand in case of breakage may want to investigate the new disposable baby bottles now on the market.

The bottles usually are sold in sets which include a lightweight plastic liner; boxes of thin "bottles," nipples, and a device known as an expander.

The "bottles" are actually thin plastic bags which are packed in a long roll much like some brands of sandwich bags. The user simply tears off a bag, inserts it in the liner and fills it with formula. A nipple snaps on next, and the bottle is ready.

The expander is optional. It fits inside the liner and collapses the bottle as the child drinks. This prevents air from entering the baby's stomach through the nipple.

Disposable bottles offer the convenience of not having to sterilize bottles. After use, the plastic bag which held the formula is simply thrown away. Only the nipples need be sterilized. The plastic liner can be washed in soapy water.

Giving a Bath

Ordinarily this is not done in the Centers, but on occasion, if a baby has thrown up or has become extremely dirty, it may be necessary. Every precaution must be taken against allowing the baby to become chilled.

Equipment needed:

Newspaper to protect table, floor, chair;

Covered pail for diapers;

Large sturdy paper bag for waste;

Pitcher for warm water;

Bath tray with:

(a) Covered dish for cotton swabs
(b) Soap dish
(c) Covered dish for pins
(d) Baby oil
(e) Cotton swabs

Pad to cover table;

Large bath towel;

Small towel and soft wash cloth;

Clean clothes for the baby;

Tub.

Procedure for Giving a Bath

1. Close windows and doors.
2. Room temperature must be between 75° and 80°F.
3. Spread newspaper on floor and place pail, with cover removed, on newspaper.
4. Wash hands thoroughly with soap and water.
5. Arrange table:
   (a) Cover with pad;

(b) To the left, place toilet tray with covers off all containers;

(c) To the right, place bathtub ⅔rds full of water (105°F); Test with elbow—it should feel just pleasantly warm; place a folded diaper on the bottom of the tub;

(d) In front of the tub, place the pitcher of warm water;

(e) Spread the large bath towel on the pad, in the space between the tub and the tray;

(f) Place the baby's clean clothes on a chair, those to be put on first on top;

(g) Place wash cloth and small towel on edge of tub.

6. Lift baby from its basket or crib onto large bath towel.
7. Support baby's back and neck at all times.
8. Remove outer clothing and fold towel over baby to keep it warm.
9. Wash face, eyes, outer ears, with clear, warm water from pitcher; use wash cloth wrung out quite dry.
10. Clean nose with cotton swab, lightly oil if necessary.
11. Soap baby's head and rinse with the wash cloth, dipped in clear, warm water from the pitcher.
12. Remove rest of baby's clothes and put baby in tub, supporting baby with one hand held firmly under his back and buttocks, supporting the head. Soap baby with other hand and rinse off.
13. Remove baby from tub and gently pat dry.
14. Fold the towel over him to keep him warm.
15. Cleanse the genitalia with small swabs of cotton moistened in oil. Wipe off excess oil.
16. Dress and replace baby in basket or crib.

Changing Diapers

This is always done in the baby's own crib. Remove soiled diaper, placing it in covered can. Make sure cover is on tight so that flies cannot enter can. Wash hands. Cleanse baby using small balls of cotton moistened with oil, as necessary. Place cotton in covered can. Wash hands. Place a fresh disposable diaper on the baby. Again, wash hands before doing anything else.

Taking a Baby's Temperature

This is done with a rectal thermometer, which has a round, ball-like end. Before using this thermometer, it should be sterilized with alcohol. Cover the end with petroleum jelly so it will slip in easily. Be sure the mercury is below 98.6°F. Lay the baby on his stomach and slip the thermometer gently into the rectum. An adult must hold it and hold the baby while the thermometer is being used. If a baby's temperature is taken this way, it is slightly higher than temperature taken orally; about 100°F may be considered normal.

Program

Formulas should be made the preceding night or late afternoon. Most babies will be able to digest and benefit from the regular formula, but each mother should be consulted when her baby first enters the Center to see whether the baby should have a special formula or special feedings.

Every baby should be picked up, held and cuddled at least once every hour when he is awake. Babies who do not get affectionate care from gentle but firm adults who can give them a sense of security may fail to mature emotionally as they should.

Every bed must be kept clean and dry. If the sheet becomes wet, change it. If the baby becomes wet, change him. The test of a good baby room is clean, dry, contented babies who have a loving relationship with the people taking care of them. Well cared-for babies do not cry continuously, but only when they have a need which is not being fulfilled.

Creeping infants should be placed in a play pen or should be given a play space on a blanket. They must be taken out of their cribs to play when they are restless. They may play with rattles, large spools, beads firmly tied on strong strings, plastic disks, and the like. Toys must be large enough so the baby cannot swallow them. If toy animals are given to a baby, be sure the animals do not have glass or plastic eyes that the baby can remove and swallow.

During nap time it is not necessary to try to completely darken the room or have absolute quiet.

Toddlers should be allowed to run around during play time. A variety of simple toys must be provided. They like to play hide and seek or peek-a-boo, to push and pull, to pour, to fill and empty, to splash, to pat and pound, to cuddle soft toys and to be cuddled themselves. If they cry on arrival at the Center, a cracker may quiet them.

Schedule for Babies

7:00 a.m. Arrive. Early inspection, put to bed.
Remove baby's own diapers and place in baby's own cloth bag.
Formula, if necessary.
Diapering procedure, as necessary throughout the day.
8:00 a.m. Cereal and formula
10:00 a.m. After a baby is four weeks old, put him out in the sunshine (but not in direct sunshine) for 3-5 minutes, gradually increasing the time each day.
For older babies—6 months or so—place outdoors (not in direct sun) for half an hour.
Back to bed.

2:00 p.m. Feed vegetables, fruit, formula (follow the instructions of a nurse for each baby).
For all except small infants, and for them in particularly nice weather sleeping outside for 1½ hours, covered with mosquito netting.
6:00 p.m. Feed cereal, fruit, formula.

Schedule for Toddlers

7:00 a.m. Arrive. Breakfast and nap with bottle.
A snack (orange juice and cracker on awakening).
9:00 a.m. Toileting—playtime indoors or out.
12:00 Noon Toileting—wash up—lunch.
The adult must feed those who need help. Food should be cut into small pieces.
1:30 p.m. Wash up—bottle and nap.
4:00 p.m. Toileting—wash up and snack.
4:30 p.m. Play time outdoors if weather permits.
6:00 p.m. Toileting—bottle and nap.

Special Schedule

(for toddlers when their group is combined with the babies and the pre-school group)

7:00 a.m.-9:30 a.m. (or until after toddlers' snack) babies and toddlers together.
9:30 a.m.-11:00 a.m. toddlers and pre-school together.
11:00 a.m.-4:00 p.m. toddlers again with babies.
4:00 p.m. until time to go home; toddlers again play outside with pre-schoolers. If it is a particularly long day, the toddlers should be put to bed as soon as they show signs of fatigue.

Pre-School and School-Age Care—

The value of the program to the children depends largely on the sense of responsibility, the vitality, and the imagination of each leader. She must enjoy living and working with children, and she must understand and be able to meet their individual and group needs. This means knowing each child well and planning the program carefully with the needs of each child in mind. Planning must be kept flexible so that new interests may be developed and special events or surprises introduced from time to time. The atmosphere of the room should be friendly and informal. Rules for safety and health should be made clear to the children and followed consistently. A leader should not be afraid to say "no" when activities become destructive or uncontrolled.

For successful operation of a Center, cooperation between staff members is essential. Each one must not only assume full responsibility for her own job, but must be ready to share in the work of the Center as a whole. In the long run, each adult in the Center is partially responsible for every child, whether under her direct supervision or not. Only by a fruitful pooling of everyone's resources and energy can the children gain the utmost from their brief stay.

Pre-Schoolers

Physical Development: There is gross body control but no skilled coordination of small muscles. Large muscle control is being developed as well as memory and vocabulary.

Mental and Social Development: They enjoy individual play, have a limited attention span, are curious, imitative and dramatic. Their standards of right and wrong are based almost entirely on adult control. They are interested in nature, animals and making things and they enjoy running, climbing, jumping, and kicking.

Needs and Interests: They need plenty of sunshine and outdoor play, and nature can be the basis of much of their learning. They enjoy activities which allow large muscle development as well as games requiring imagination. Habit formation (in the daily routine) is very important.

Suggested Activities:

(a) house play
(b) block building
(c) listening to records

(d) playing with clay
(e) outdoor play
(f) coloring
(g) stories
(h) sand play
(i) simple organization games

School Agers

Physical Development: There is a continuous increase in weight and height. Children at this age usually generate a tremendous amount of energy which needs channeling. They tend to get overtired easily. There is greater control of small muscle movements (they can tie shoes or cut paper).

Social and Mental Development: This can be called the "individualistic period," because their interests are largely centered on themselves, and their friendships are short-lived. They are very active, and highly unpredictable. They are highly imaginative and love to pretend. They are anxious to try new things.

Needs and Interests: They ask many questions and need and want honest answers to them. They are greatly influenced by the ideals and conduct of adults and need good examples to follow.

Suggested activities:

(a) parties
(b) block building
(c) house play
(d) clay modeling
(e) simple organization games
(f) gardening
(g) records
(h) singing
(i) outdoor play
(j) quiet games
(k) projects
(l) rhythm band
(m) dancing
(n) water coloring
(o) cutting and pasting
(p) science

Opening the Center

Assistant directors and group leaders are responsible for cleaning their own playrooms and for unpacking and arranging all supplies and equipment. When this has been completed, the director should approve the arrangement. When the room has been approved, these workers should offer their services to some other group until the entire Center is in readiness.

Bulletin Board

The bulletin board in each room must be in a conspicuous place and be supplied with the following information:

1. Current staff schedule.
2. Children's schedule.
3. Program for the week.
4. Attendance sheet for the group.
5. Fire drill plan.

Room Guide

1. Storage space for play materials and supplies is necessary. Space within the reach of children should be supplied for their extra clothing and other belongings.
2. Cots must be scrubbed and marked with the children's names at both ends and kept on racks when not in use.
3. The room should be attractively decorated with gay curtains, bright colors, pictures, etc.
4. Tables and chairs should be arranged conveniently for eating and for program use.
5. Additional doll furniture as needed should be made by staff members when the room is ready.

Room Arrangement

Much of the success of the program depends on careful planning of space for maximum efficiency and good play experiences. Corners should be used for centers of interest. The middle of the room should be kept clear to allow for floor play.

House Corner: Select for maximum space. Dolls' beds and bedding, stove, sink, icebox, ironing board, kitchen cabinet, tables, chairs, dressing table with mirror, toy dishes, forks and spoons, irons, telephone, pots and pans, dolls.

Dress-up Clothes: Place hangers on the wall nearest the house corner.

Blocks: Stacked according to size and shape in sturdy boxes, not dumped in cartons. Small trucks, trains, boats, wagons and toy people should be kept next to the blocks.

Painting: Wall easel away from exits, with storage space above it for brushes, jars and paints. Smocks or aprons hung close by.

Clay: Kept moist, covered with a wet cloth, in a large can always ready for use. Clay should be used on small clay boards or oilcloth squares. Water in a basin and paper towels should be ready.

Carpentry: A sturdy table in a corner. Tools hung from nails placed against silhouettes of the tools drawn

on the wall. A wooden box for wood storage. Nails and screws in cans. Scrap wood obtained from community or warehouse.

Books: Arranged on shelves attractively within reach of the children. A reading table and chairs close to the bookcase for individual reading or for reading aloud to the group.

Water Play: Indoors or out. Provide basins for washing dolls' clothes and dishes. The large tub can be used outdoors for wading, splashing, sailing small boats. An inexpensive plastic wading pool can be purchased at a variety store.

Finger Paints: Finger paint material always available in small covered jars. Provide smocks or aprons for every child and enough table space to permit freedom of motion. Water and paper towels should be ready for washing up.

Rhythm Band: All available pot covers, cans, large spoons, cereal box rattlers, drums, etc., may be used. Instruments which are not to be returned to the kitchen can be kept in a large box. Music activities should be planned.

Science Table: Encourage use of aquarium, collections, and the making of small gardens. Table displays should be changed frequently.

Craft Materials (For school-age children only): A covered sewing box should be available with thread, needles and scissors for use by both boys and girls. Scraps of cloth, ribbons, lace, buttons, feathers; yarn for simple knitting: large pieces of cloth for making bibs, aprons, skirts; leather scraps for belts and pocketbooks. Anything else obtainable from the community for sewing purposes should be collected. Beads, bracelets, caps, stuffed animals, rag dolls, bed slippers, costumes and bean bags are a few things which children can make.

Miscellaneous Materials: Crayons, scissors, construction paper, paste, etc., should be kept in marked boxes or jars within the children's reach.

Outdoor Equipment: The Center should attempt to provide rocking boat, seesaw, sand box, ladder, baseball equipment, saw horses, sand toys, kegs, play boxes and other toys. All equipment should be taken inside each night, with the exception of the sand box. The school-age children may help in doing this. It is imperative that all outdoor equipment be brought into the Center as soon as the children finish playing with it. Use this equipment for games, sand and water play, seesawing, and for dramatic play. Dramatic play may include playing boat, bus, truck, store, train, and so on.

Schedule for Pre-School and School-Age Children

7:00 a.m. Arrive. Health inspection.
Breakfast, if necessary.
Sleep on cots.
9:00 a.m. Toileting and wash-up.
9:30 a.m. Mid-morning lunch.
10:00 a.m. Organized play with story session at end.
11:30 a.m. Toileting, wash-up, relaxation on cots, if possible.
12:00 noon Lunch, followed by toileting.
1:00 p.m. Rest period, all children up by 4 o'clock.
3:00 p.m. Quiet play for children who are awake.
4:00 p.m. Mid-afternoon lunch. This may be delayed until 5 o'clock if parents are going to be late.
4:30 p.m. Indoor and outdoor play, water play, trips, special events.

Play Program

The program for each week, including routines, indoor and outdoor activities, both in the morning and in the afternoon, should be carefully planned and written out. The plan should be changed according to the weather. Quiet and active playtimes should be alternated to avoid fatigue. Time should be allowed daily for discussion of plans and special interests with the children. Standards of performance should never be at an adult level. The value of each activity is measured in terms of the children's growth and enjoyment. It is understood that not all of the children will engage in the same activity at the same time, but will have a chance to follow their own special interests. Each child is expected to participate in some activity, however.

Children's growth through play occurs when the adult is alert and understands the implications of the day-to-day activities of children. The adult should guide them and help them to a better understanding of their world. The adult must arrange and plan equipment so as to stimulate the children and encourage growth. She is responsible for planning each play period so that it will meet the children's daily needs and give them opportunities for physical and emotional growth.

Through play a child learns many things which will help him develop into a well-adjusted person. Well supervised play helps him to learn to consider the rights of others, to develop his thinking processes, to increase his confidence in his own ability, and to find his place as an acceptable member of the group.

Children need raw materials that hold possibilities for imaginative, experimental use. These should always be available and there should be enough time and space for thoughtful exploration. It should always be remembered that an end product is not the goal; it is the children's experience that is important.

Children's individual and group play varies as they grow and change. Two year-olds and many 3-year-olds like to play alone. Frequently, each child is doing the same as the others, but independently. Four-year-olds often play in small groups for short periods of time. Five-year-olds often play in small groups for as long as 30 minutes. Older children play in larger groups for longer periods of time.

Children at all ages like to play "house," have a "father," "mother," "sister," "brother," and "baby." They imitate many housekeeping duties such as dinner, doctor's call, riding on a bus or in a truck (help them if they have not developed the ability to imagine such situations).

Routines

The routines which have to do with children's physical development and well-being need careful planning. They include daily health inspection, toileting, washing, rest periods, dinner, snacks and fire drill. Group leaders must see that routines are carried out easily, regularly and efficiently.

Each Center should have a definite daily program so that each routine is followed every day at the same time. For example, if lunch is served at 11:45, it should be served at 11:45 every day. This regular daily routine (without regimentation) gives children a needed feeling of security.

At the same time, it is important to keep in mind that each child is an individual and will respond in his own way. This does not mean that in regard to routines a child does as he pleases, but rather that the adult guides and helps him to do what is expected. It means that the adult should know about the individual child, always having in mind the goal which seems best for him or her. For example, most 2-year-olds need a great deal of help in washing themselves. Frequently the adult does most of it for them. Three-year-olds can wash themselves but need constant supervision and occasional help from the adult. Four-year-olds are for the most part independent in washing and need only occasional guidance. Children of school age are usually able to manage this routine independently, with minimum adult supervision.

A. Health Inspection: Each morning when the Center opens the group leaders examine the children for:
   1. Sore throat;
   2. Eye, ear or nose discharge;
   3. Rash on face, neck or chest;
   4. Lice in hair;
   5. Clean hands.

   This may be done informally, but should be regular and thorough. A sick child or one who is spreading germs should not come to the Center, but should be at home with his mother.

B. Toileting and Washing:
   1. One leader takes the children by twos or threes from the playroom to the toilet, then to the washroom, or all may go in one line and wait for all to finish before returning to the room.
   2. The leader should closely supervise to be sure children flush toilets and wash hands properly. The leader should hand out paper towels so that the children do not use too many at once.
   3. Wall space must be provided for individual wash cloths, with each child's name plainly marked. It is helpful to paste a photo of each child above the wash cloths to help them identify their own. If there is no space available, a folding drying rack or coat rack should be used.
   4. During washup, someone prepares the playroom for quiet play or rest.

C. Resting:
   1. Five to 10 minutes' rest before lunch and a long nap after lunch are customary.
   2. The room should be cool and darkened, if possible.
   3. Each child should have his own cot in a regular place with his own name on it and his own blanket and sheet.
   4. See that each child goes directly to his own bed after going to the bathroom. Each child must remove his shoes.
   5. Cover him up, if necessary.
   6. If a child is restless or noisy or both, say, "It is time to rest; after you rest, we will have time to play."
   7. If still restless, he may need to be picked up and loved for a few minutes.
   8. If deliberately noisy and disturbing, suggest he may have a rest by himself, away from others. Say this only if you are able to put him by himself and intend to do it.
   9. A story or record will help to quiet children but should only be done if all remain quiet.
   10. At the end of the rest period, fold blanket and put away cot.

D. Lunch:
   1. The children are seated by groups, with an adult at each table.
   2. Small amounts of food are given at first, with second helpings available.
   3. In a large center the nursery school group may eat first, then the school-age group.
   4. If indoor space is limited, the children may eat outdoors. The food may be carried out in the kettles and served directly at the tables if the distance from the kitchen to the tables is too far to carry individual servings.
   5. The school-age group may help set the table, serve the food to the younger group and to themselves and clear away the dishes.
   6. Immediately after dinner the children are taken to the toilet, washed, and put down for a long nap.
   7. Meal time should be a relaxed, peaceful occasion for all. If the adults are patient, sympathetic and understanding, this can be achieved easily.

E. Snacks:
   1. Morning snack consists of fruit juice and crackers, and should be served at the table.
   2. Afternoon snack may consist of sandwiches and milk. The director should learn if parents are to be working late each day, and delay the time for the afternoon snack to correspond. The snack may be served outside with the children sitting in a circle on the grass. Choose children to pass out milk, straws, napkins, and sandwiches and to collect garbage in a bag or basket.
   3. If the parents are to be very late the children may be given supper.

F. Fire Protection:
   1. All exits must be kept clear at all times.
   2. Fire drill: Definite instructions should be given for procedure in case of fire, and once every two weeks a practice drill should be held to be sure everyone understands her position and duty.

Techniques

In providing Child Care Centers which give children the experience they need, there are certain techniques which help to develop good adult-child relationships. They also help in solving the day by day problems of children.

Staff members should speak and act with assurance, showing that they expect the proper response. The child's attention must be gained before the leader speaks and he must understand what is being said. What appears to be disobedience is often failure to hear or understand.

Children respond most readily to simple, short, positive statements. Some examples: "It is time to wash;" "It is time to rest;" "Let's pick up the blocks." A statement of the activity to follow is often effective: "Let's pick up our toys so we'll be ready to go home." If at times (and this is rarely) a negative statement is used, it is a good plan to follow it up with a positive statement: "We don't hit people with blocks; we use blocks to build with."

Leaders need not shy away from the proper use of authority. However, authority must be calm and assured. To exert the proper authority an adult must have planned well and thought through the result she anticipates. It is a loving, gentle authority, with affection, which gives children the security they need.

The Group Leader

1. must set a good example;
2. has a good sense of humor and exercises it to avert crises and prevent molehills from becoming mountains;
3. uses power of suggestion to get the group to accept her ideas as their own;
4. avoids misunderstanding by respecting another person's views—avoids arousing antagonism;
5. when there is work to be done, she is in the midst of it—assigns each person a task and then pitches in;
6. is ever mindful of the value of fun, for happy children rarely become problems;
7. realizes that requests get better responses than orders and knows that children want controls—always enforces discipline or finds someone else who can;
8. gives praise freely—avoids nagging and fussiness about details;
9. never uses physical punishment;
10. uses discipline measures sparingly and makes sure the child knows why he is being disciplined.

Remember These Points

A baby is not necessarily "spoiled" because he wants to be held. All babies need cuddling; they need to be played with. They are social creatures and seek companionship.

If a child sucks his thumb don't take it out of his mouth or shame him. Give him something interesting to do, perhaps something that requires both hands. See to it that the child gets plenty of cuddling throughout the day. Thumb sucking is usually indulged in for security.

Nail-biting usually indicates tenseness. It won't do any good to call attention to it. Try to find out what some of the pressures are, see if they can be lessened.

Touching or playing with the genitals is almost universal in children of 3 years of age or thereabouts, so some authorities say. Never label it "bad." Often children need affection to assure them of love or they need assurance about body differences of boys and girls. Try to sense what is troubling a child and then give him the assurance he needs.

Never make an issue of toileting. Sensitive children are easily disturbed by hurry and/or by stress. If this natural process can be handled in a matter-of-fact way, complications usually will not arise. On the other hand, children have been known to withhold or give their movements to punish or to please the adult. Be casual and friendly.

Bed-wetting is usually caused by tenseness. Scolding or nagging aggravates the condition. Limit liquids before nap time and set out to make that child a happier, less tense child, helping him to be freer and more outgoing.

Day-time wetting with toddlers usually occurs because adults do not schedule toileting often enough during the day. Young children often are not willing to give up their play, even for a few minutes, and wait too long.

Watch for the children who do this frequently, and ease the situation with some remark such as "Let's take the car on a trip to the bathroom—fast!"

Encourage children to eat but do not coax or force them. It must be remembered that dessert has food value. Never withhold it as a punishment.

Fundamental Needs Of Children

When a child misbehaves continually, he has not found a satisfying way to meet one or more of his basic needs. When trouble arises, seek and eliminate the cause. Here are some common needs and behavior patterns which suggest the needs:

1. Need for Affection—ones who demand extra attention. Give them a pat on the back, listen to their achievements, always have a friendly "hello," or tuck each in at nap time and rub their backs for a while.
2. Need for Power—a bully who controls others through fear, or a leader who dominates. Give him something where he can achieve and succeed. Watch competition for those who can't achieve.
3. Need for Security—one who withdraws or is hyperactive. He needs help in becoming familiar with surroundings and people. Know something about him or his family, be sure his name is on his bed and that you call him by name the first day. Always explain complete schedule and routines even to younger ones so they will know what to expect. Let them know you are there to protect them.
4. Need for New Experiences—one who becomes bored. Have a varied program which the child helps to plan. Include trips each day, no matter how small it may be.
5. Need for Recognition—ones who speak out of turn or seeks to disrupt activity. Each wants to stand out as an individual. Rearrange program to make use of some talent not called for by regular routines.

Improving The Self-Image

It has been found that many disadvantaged children have a poor opinion of themselves and their self-esteem is at a minimum. Many of these children have never seen themselves as others see them—neither in a mirror nor in a photograph.

A source of fascination and a great morale booster for these children is to see themselves in a mirror. Since there is a safety hazard involved in using glass mirrors, it is suggested that mirrors made of highly polished metal be used instead. Be sure to hang them at eye level.

Another positive learning experience for the children is to give each of them a Polaroid photograph of themselves. A Polaroid Camera taking black and white photos can be bought for less than $20. (This camera produces a finished picture in 15 seconds.) A Polaroid Colorpak II camera can be purchased for less than $30. The film used with this camera will take eight color photos per roll. Each color shot is developed inside the camera in a minute.

Also, if your budget allows it, an inexpensive 8mm movie camera can be purchased and movies can be taken of the class. Seeing themselves in a group situation is generally a new experience for these children. A movie screen and 8mm projector can either be borrowed or rented.

Food Service—Cooks

Opening the Center

The cook is responsible for cleaning the kitchen. Shelves, stove, refrigerator, and sink should be thoroughly washed and scoured. All dishes, cooking utensils and service equipment should be washed and stored on the shelves or cupboards provided. All food should be unpacked and arranged in convenient places near working areas. Extra supplies should be unpacked and stored for future use.

Bulletin Board

A bulletin board should be posted and should contain the following:

1. Menus for the current week.
2. Memo for ordering daily supplies such as milk, bread, etc.
3. Directions for using bulk supplies and large quantity proportions.

4. Time schedule for snacks and lunch for each group of children.
5. Daily enrollment for each group.
6. List of supplies needed.

Duties

1. Plan the menus for the week with the director.
2. Plan the ordering of supplies.
3. Prepare snacks and lunch, breakfast and supper.
4. Help with serving of snacks and lunch.
5. Wash dishes, clean up kitchen, wash dish towels, scrub floor.
6. Wash inside of refrigerator twice a week.
7. See to disposal of garbage and keep garbage containers clean.

Schedule

8:00-9:00 a.m. Put kitchen in order, check menu, get out necessary food, begin baking.
9:00-10:00 a.m. Set up trays for snack, serve snack, prepare vegetables.
10:00-11:00 a.m. Clean up, prepare main dish.
11:30 a.m.-12:30 p.m. Serve lunch.
12:30- 1:30 p.m. Clean up and wash dishes.
1:30- 2:00 p.m. Set up afternoon snack trays, check groceries for next day.
Late Afternoon. Help with children, if needed.

Routines

Proper storage of food:

1. Milk must be kept cold, covered and clean.
2. Foods should be kept covered.
3. Perishable foods must be stored in the refrigerator.
4. Staples should be kept in clean, covered containers.

Care in preparation and service of food:

1. Only healthy people should prepare or serve food;
2. Food handlers should wear clean, washable clothes and a hair covering;
3. Hands should be washed often and fingernails cleaned with an orangewood stick;
4. The kitchen and all equipment should be kept clean;
5. Garbage cans should be tightly covered;
6. All doors and windows should be screened and all screens kept closed;
7. Refrigerators and storage space should be cleaned regularly and should be orderly at all times;
8. After lunch, all tables should be wiped off, food picked up and chairs sprayed with disinfectant.

Proper dishwashing procedures:

1. Scrape, rinse, and stack dishes;
2. Wash dishes in clean water as near to 120°F. as possible, using a dishwashing detergent;
3. Wash glassware, silver and china, in that order, changing the water as it becomes necessary.
4. Immerse dishes and silver in clear water maintained at a temperature of from 170° to 180°F.;
5. Allow the dishes to dry without toweling; if this is not possible, use clean towels for drying the dishes;
6. Both towels and dishcloths should be washed and boiled daily and dried in the sun whenever possible.

Food Preparation to Retain Nutritive Value:

Foods should be prepared to save the minerals and vitamins and to make them as digestible as possible. Some suggestions are:

1. Avoid peeling fruits and vegetables whenever possible. Potatoes may be cooked and served with the skins on, either boiled or baked.
2. Vegetables and fruits which have been peeled should not stand exposed to the air for a long time. If it is necessary to prepare them ahead of serving time, keep them covered and cold.
3. Eggs, cheese and meat should be cooked at a low temperature to prevent toughening.
4. Fruits and vegetables should be cooked quickly in as little water as possible.
5. Fresh fruits and vegetables should not be soaked before cooking.
6. Dry beans should be washed first, then soaked and cooked in the same water in which they were soaked.
7. Water in which vegetables have been cooked should be used in soups and sauces.
8. Baking soda should not be added to vegetables. While it does preserve color, it destroys much of the food value.

Snacks:

1. Know the time each snack is to be served.
2. Know the number of children in each group.
3. Have a dish of warm water and cloth ready to wipe off tables.

Morning Tray:

1. Plate with a cracker or graham cracker for each child and teacher.
2. A glass, turned upside down, for each child and teacher.
3. A pitcher of juice (covered).
4. A napkin for each child (bibs for the toddlers).

Afternoon Tray:

Sandwiches or cookies instead of crackers. Milk instead of fruit juice.

Snack Clean-Up:

1. Wipe off tables.
2. Return trays to kitchen.
3. Wipe off trays.
4. Wash dishes.
5. In morning, reset tray with glasses for lunch.

Lunch:

1. Wipe and set tables.
2. Set up trays with napkins, glasses, spoons, plates or bowls.
3. Serving may be done in one of three ways:
   a. In the kitchen
   b. From a counter
   c. At the table
4. Lunch clean-up. Let children help.
   a. Use wastepaper baskets or box for soiled napkins and garbage
   b. Wipe tables
   c. Sweep floor
   d. Scrape, rinse and stack dishes
   e. Wash dishes

In large Centers where the snacks and lunch are served at three different times, the staff responsible for the children, with the help of the older children, set up the tables, carry trays from the kitchen to the tables, and clean up.

Hints:

1. Baby food jars may be used for glasses.
2. Baby foods (if used) such as prunes and apricots may be used in fruit whips. Strained vegetables may be used as bases for soups.
3. Make sandwiches with one slice white, one slice brown bread.
4. Paper napkins can be cut in two.
5. Plan with director how to serve drinks of water on the playground.
6. Let the school age children help. They may peel potatoes, set tables, clear tables, do dishes, cut napkins, make gelatin, bake cookies, prepare sandwiches. Let them prepare food for picnic, party or parents' meeting.

Feeding Infants

The question of what types of solid food to feed infants is one which must be answered by each Center, depending upon the size of its budget and staff.

Most disadvantaged parents do not feed their children pre-packaged baby foods. They can't afford them. Instead, the child is fed mashed adult food and he usually eats at or near a table with adults.

If it is decided to serve prepared strained and junior-style foods in your Center you will find them available in a wide variety of meats, vegetables and fruits and combinations of meats and vegetables. They are sold in glass (or plastic) jars which do not require refrigeration until opened.

If your Center's budget does not permit the use of baby foods, an economical way of providing a good substitute is to use an electric blender. Blenders can be purchased for $20 and up and can be used to puree adult foods for feeding to babies. (The cook will find many other kitchen uses for the blender.)

Feeding infants who cannot sit in regular chairs may mean the purchase of either high chairs or flexible plastic baby carriers.

It's also a good idea to set aside a small plastic spoon for each infant. Don't use an adult-size metal teaspoon—you'll hurt the infant's mouth.

Supplies

GENERAL

Hooks and hangers (for clothing)
Mirrors
Range with oven
Refrigerator
Shelving
Sinks
Storage cabinets
Toilets
Wooden crates (for coats)

INFANT AND TODDLER CARE

Alcohol
Baby bathtub
Baby oil
Baby soap
Bedding
Bottle brush
Bright curtains
Colored playthings
Cotton swabs
Covered container (for soiled diapers)
Cribs
Disposable bottles (optional)
Disposable diapers
Drying racks or hooks
Instant formula (optional)
Newspapers
Paper bags
Petroleum jelly

Pictures
Pitchers
Rectal thermometer
Safety pins
Small scrub brush
Sterilizer
Table pad
Tags—cloth or paper (for children's names)
Talcum powder
Towels
Toys
Washcloth

PRE-SCHOOL AND SCHOOL AGE CARE

Basins for water play
Bedding
Cots
Dress up clothes
Hand mirrors (optional)
Paper towels
Plastic wading pool (optional)
Polaroid camera (optional)
Sand box
Smocks or aprons

KITCHEN AND HOUSEHOLD

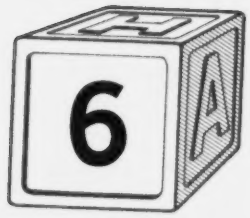
Aluminum foil
Bleach
Broom
Can and bottle openers
China
Clothesline
Clothespins
Detergents and cleaners
Dishcloths
Dishtowels
Dust pan
Fly swatters
Funnel
Garbage cans with covers
Glasses
Hand soap
Insect spray
Matches
Mop
Napkins
Other utensils
Pails
Paper cups
Paper towels
Pitchers
Pots and pans
Scouring pads
Silverware
Spray disinfectant
Toilet brush
Toilet cleaner
Toilet paper
Trays
Vegetable peeler
Waste paper containers
Waxed paper

HEALTH AND SAFETY

Absorbent cotton
Adhesive tape
Alcohol
Antiseptic
Boric acid
Flashlight
Gauze bandages
Mercurochrome
Ointments (for burns)
Plastic bandages
Scissors
Thermometer

Section II

This section is intended to give you ideas as to possible materials and ways of preparing and using them, in setting up a good creative play program for children. Each day's plan should include several activities, so that the children may choose and may move freely from one to another. There should be enough variety in the materials offered so that children of different ages and abilities may find things that interest and challenge them. On the other hand, it is common sense for the group leader to limit the activities to a manageable number. If the plan for the day includes something which needs considerable supervision, such as finger painting or carpentry, then other activities should be relatively simple and easy to supervise. In the course of the week, however, there should be a great deal of variety and choice.



Easel Painting

Painting is one way in which a child expresses his ideas. Most children begin by dabbling, more for the feel of it than for the picture. They then move on to painting a pattern, and finally paint something which they remember, or which they would like to be, have or do. The adult accepts each child's work just as it is, without asking him what it is or anything about it. But she shows him that she is interested and that she likes what he has made. She provides the materials and the environment and keeps things going smoothly, helping with the actual work only when requested by the child.

Materials You Will Need

Large brushes. There should be one for each color, or a jar of water for each child to wash his brush in, otherwise the colors soon all turn a muddy grey-brown.

Large sheets of paper. Tack or slip these on wall easels which are placed far enough apart so that the children won't bump each other. Lacking easels, you can tack the paper to pieces of beaverboard or cardboard or lay the paper on newspaper on the floor.

Containers for paint and water. Use baby food jars or frozen orange juice cans; larger cans for the water. Of course the can tops should be cut off smoothly, with no jagged bits of metal remaining.

A smock for each child to wear over his clothes. An old shirt makes a good one. Put it on backwards so the opening doesn't come right over the child's stomach—they never remember to button them.

Rags or sponges for cleaning up.

Paint. This will usually be powder paint, mixed with water to the consistency of cream.

How to Set Up And Care For Paints

Mix your paints fresh every day or almost every day. If you make too much at a time, it may spoil. If you do have some left over, however, it can be kept for a while in the cans or jars by folding aluminum foil closely over the tops.

You'll soon learn about how much water to add. The paint should not be too thick, as it will crack and fall off when it dries—nor too thin, because the colors aren't nice. Stir out lumps until the finished paint is smooth and creamy. It's easiest to pour out some of the dry powder paint and add water to it a little at a time.

Have the paint paper all clipped or tacked in place before the children come to paint and have more paper nearby.

When a child finishes a painting, mark his name on it and place it on something flat to dry. An older child can get himself a new piece of paper if he wants to paint another, but you'll have to do it for a little child. Of course, when children first start painting they don't spend very long on one picture. Don't be surprised or discouraged if the children seem merely to be racing through the materials at first. They have to experiment and explore before they can concentrate on one idea.

Be sure the brushes are clean and that the cans of clean water are available before the children start to paint.

What Should Be Taught About Painting

Very little! Paintings should be the children's own free expression, done without pressure from adults. Express appreciation, "That's a lovely picture," but seldom ask, "What is it?" for then the child thinks he must produce a subject to meet a grownup's demand and it spoils his freedom.

Children generally go through these stages: covering whole sheets of paper with scribbles or with masses of solid color; making patterns; making pictures which express what is important to the child about himself or his world; making pictures which he wants to have look real. A child is usually 6 or so before he is painting pictures which tell about himself and his ideas—the child who paints a great big man and a little house knows that a house is bigger than a man, but to him at that time the man is more important than the house, so he makes him bigger. Children are usually 9 or 10 before they begin trying to make pictures that look real, using perspective, realistic color, etc.

You can help children learn to use materials by showing them how to use the brushes—getting them full of paint but wiping off the extra paint on the edge of the jar or can; washing them in water before changing colors; painting smoothly without scrubbing—and getting them the paint and paper they need. Of course, they shouldn't throw or splash paint, and that can be told to them kindly but firmly if the problem arises.

Occasionally an older child may ask to be shown how to make a certain object. If possible, show him the object itself, but if this can't be done, talk about it with him, get him to feel out the shape with his hands and otherwise gain a feeling of what it is really like. Drawing something for a child or giving him a pattern or a picture to copy is never good, for it is saying in effect, "You can't do it, so here is something done for you by a grownup who can." The aim of painting is for the child to express his ideas, not to produce any certain picture. Don't take away from him his own chance to think and feel in his own way.

Finger Paint

This is a basic creative material for all children. The smallest ones will be just as happy using the paint over and over on any clean, smooth surface such as oilcloth, or a painted table top. Older children prefer sheets of smooth, shiny, wet paper to work on and may want to save these after the paint has dried.

Finger paint is inexpensive and easy to make. Here are two recipes which work:

A Recipe Which Needs Cooking

Soften in a small bit of cold water:

½ cup cooking starch

Add this to:

1 quart of boiling water

Make a thick starch, stirring constantly till the mixture bubbles. Remove from the flame. Let it cool somewhat.

Add:

½ cup of mild soapflakes

¼ cup of inexpensive talcum powder (for pleasant odor and to help preserve the paint—this is nice but not necessary)

Stir until smooth and well mixed.

When cool, pour into screw-top jars

Color each jarful with poster paint or vegetable coloring (This gives less vivid colors than poster paint and is usually not quite so satisfying to children. Make colors deep and rich—reds, blues, greens, deep orange—avoid pastel shades.)

A Recipe Which Does Not Need Cooking

This gives a good usable finger paint, but one which is apt to be thicker and sometimes lumpier than the cooked variety. It can be used when time is limited. Laundry starch seems to work better than cooking starch for this, as the individual lumps of starch are smaller.

Start with a cup of laundry starch; mix it with very warm water till it is a smooth mass.

Add this, in turn, to as much dry wallpaper paste as it will absorb.

The resulting combination should be smooth, wet, pliable, and about the consistency of very damp cookie dough.

This, too, may be colored with poster paint or with vegetable coloring.

How To Store

Finger paint keeps reasonably well in covered, screw-top jars. If the weather is very hot, try to keep it in a cool place. Finger paint should always be made the night before it is to be used.

What Else You Need

A smooth, washable work surface—oilcloth, linoleum, a painted table top, a clean floor.

Glazed paper in large sheets. Buy a roll of pantry shelving paper and cut it into pieces about two feet long.

A big pan of water and some cellulose sponges for wetting the paper.

Another pan of water for rinsing off hands after the children have finished painting.

A smock for each child—even better, a plastic coverall.

A spoon for each color of paint you are using.

How To Start

Make your paint the night before you plan to use it. Set up your finger painting area before the children begin, with plenty of space, one adult who can supervise while the children paint, and all the materials ready.

Roll up the children's sleeves as high as they will go. Be sure each child is wearing a coverall.

Each child who is painting should have his own space, with plenty of elbow room.

Now

Wet a sheet of paper on both sides. Either dip it in the big pan, or use a sponge. In any case, make sure it is wet on both sides.

Place it on the work surface, glazed (shiny) side up, and with the sponge work out any air bubbles. Work out wrinkles by lifting up wrinkled parts and laying them smoothly.

Put a spoonful of paint in the middle of the paper. (Two- and 3-year-olds usually need help, but older children can help themselves, and after they are used to finger painting, they should be allowed to choose their own colors.)

Let the child muddle freely.

How Children Paint

The aim in finger painting is not so much to "make a pretty picture" as to gain satisfaction from the pleasant feel of the paint, to experiment with motion, and to enjoy the changing colors.

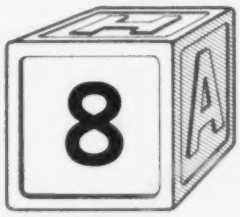
Children may be encouraged sometimes to use the whole hand and the arm, not just the fingers, and to work with large, sweeping motions.

Several colors may be used, but for very young children and beginners, it is probably better to use one or two colors at a time till they get used to the technique. Too many colors are apt to turn into a dull brown blob.

As with any other material, children must get used to the feel and the way of going at finger paint before they do free or interesting work. Don't be discouraged if very little seems to happen at first.

Paintings may be dried on newspapers but should be moved and unstuck before completely dry. Pictures which are to be kept may be pressed on the back with a warm iron and mounted.

Older children may want to use their paintings to cover notebooks, workbaskets, and so on, finishing them with a coat of shellac or clear varnish or plastic spray.



About Crayons

The younger children (most 2½-year-olds and many 3-year-olds) may prefer using crayons to painting. These children are able to make lines and they like to see where the lines go. Their work looks like scribbling (and it is scribbling), but as the lines go up and down and around, they give a great feeling of satisfaction to the children. Their muscle control and their ability to focus their eyes and their attention are being developed. Paint may seem too watery and runny to them at this stage. They want to see their lines staying where they put them.

Give them big sheets of paper and large, easy-to-hold crayons. Black is fine at first. Later, add more colors, especially red and green and blue. Let them scribble. As they become more skillful, let them think through how to draw things in their own way.

Older children enjoy using crayons, too. Encourage them to use big, sweeping motions and not to worry too much about staying inside an outline. A danger with older children is that the crayoning may get tiny and all squeezed down into one corner of the paper. Lots of experience with easel painting should help them to keep their work big and free.

Sometimes older children enjoy covering a piece of paper with bright crayon designs (done very solidly, with a thick coating of crayon). A coat of a deep shade of poster paint (black is usually most effective) washed on quickly with a wet brush will stick only to the background paper, leaving the crayon design standing out brightly. The results are often very beautiful.

Chalk Painting

This is fun every once in a while when the children get tired of the more basic easel and finger paints. It can be used by 4-year-olds and up.

Materials You Will Need

Pieces of brightly colored chalk (break them into short bits).

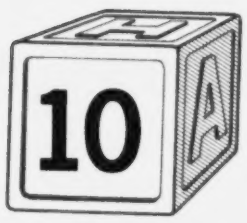
Heavy paper (brown paper bags cut open work well).

What To Do

Wet the pieces of paper with a sponge or a rag and lay them on a flat work surface. This is important. It keeps down the chalk dust and makes the colors brilliant. Let the children make designs with the pieces of chalk, holding them flat on their sides and moving them over the damp paper surface.

The aim is not to draw a picture, but to watch the colors mix and change.

The children should wear smocks and have some place where they may wash their hands. This gets really messy.



Salt and Flour Dough

This is not a true modeling material, for it will not hold its shape nor get hard; but it is wonderful for pounding, pushing, for "baking" into doll cookies, for rolling out and for just plain feeling.

How To Make It

Mix together and knead thoroughly:

1 cup of salt

2 cups of flour

enough water to make it doughlike

It can be colored with the vegetable colors used for cake frosting, or with poster colors.

Try giving it different odors by adding a bit of ground cloves, cinnamon, or other spices or extracts.

How To Keep It

It will stay fresh and usable for a long time if it is kept wrapped in waxed paper or aluminum foil in a tightly covered jar or bowl, or in the refrigerator.

If it becomes too dry and hard, knead it again with a bit more water.

If it becomes too sticky, work in a little more flour.

How To Use It

Let the children have the fun of helping mix it.

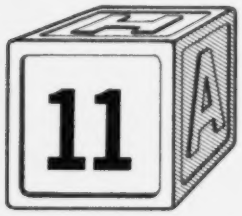
You'll need a smooth surface that can be washed (a

painted table top or some linoleum or oilcloth spread on the floor). Have the children wear their smocks and encourage them to keep as much of the dough as possible on the working surface. Give each child as large a ball as possible and let him begin.

The children will enjoy using with the dough:

rolling pins (use a smooth bottle or can)
cookie cutters
muffin tins
orange juice cans (clean, with smooth edges)
baby food jars

Sometimes an older child who is a little bothered by the messiness of real clay can be helped to start modeling by using the cleaner salt and flour dough at first. For little children, it is one of the best and most satisfying materials.



Clay

This is one of the most important materials which children use. They begin by punching, squeezing and rolling the clay. Gradually they move on to making figures of animals, people, different kinds of objects, and so on.

How To Prepare The Clay

Clay often comes in powder form. Water must be added to this dry clay till it is wet through and firm but pliable, not sticky. If too much water is added by mistake and there is no more dry clay, let it sit for a few days until it dries to the right consistency.

Clay may come moist and ready, so that all you need do is put it into some reasonably air-tight, non-rusting container. A large earthenware crock is excellent.

You may find clay in large, dry, hard chunks. Break up the chunks and add water. Give the chunks time to absorb the water (a day or so), then work the lumpy mass with your hands till it is smooth (the older children would enjoy this part of the job).

Keep prepared clay in a large crock or similar container. The best way to keep clay wet is to cover it with damp cloths. Add a little water to the cloths every few days. The clay will absorb the water gradually.

Before clay can be worked it must be "wedged." This means lumps, pebbles, stick and other objects are removed, and the whole mass is worked smooth and pliable. Handfuls of the clay can be thrown down hard on a clean surface. This knocks out air bubbles and drives the clay together. This is a job for the grownups.

Keep prepared clay in balls about 2 or 3 inches in diameter. Poke a hole in each when putting it away and fill the hole with water to keep it moist.

What Else You Will Need

A smooth, easily cleaned work surface (a painted table top, or linoleum or oilcloth on the floor).

Things for the children to use in finishing their models, such as:

tongue depressors
nails or bits of wire to make lines
cookie cutters for the smaller children's use
rolling pins for the smaller children's use

Each child should wear a smock.

How To Start

You'll save time and quarrels if you have the clay ready before the children are to use it. How much each child can have depends, of course, on how much there is and how many children want to model. If possible, roll the clay into round balls about the size of a baseball. One of these is enough for a child to work with, unless he is making an especially large object. Children should be taught to keep the clay on the working surface, to sit in one place while they are modeling so that they won't track it around, and to keep it off the floor and as clean as possible. When they are finished modeling they should return their clay to the crock.

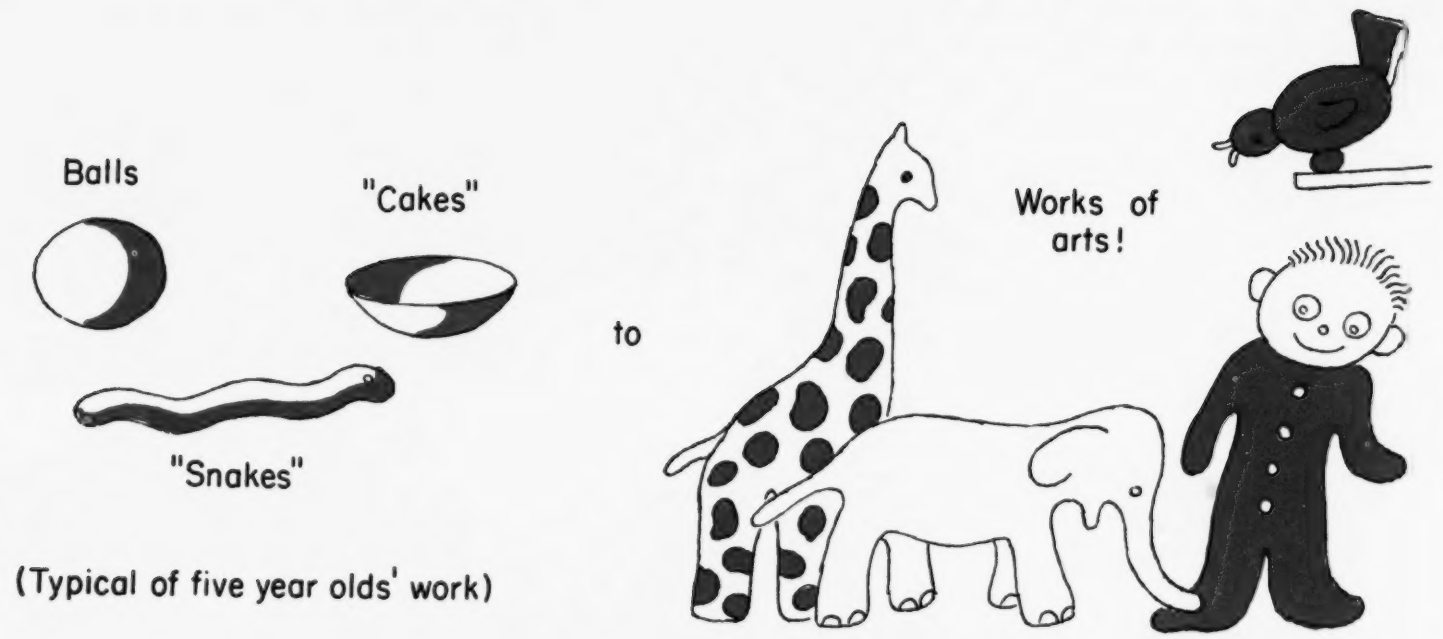


Figure 1

How Clay Is Used

In using clay, children must first experiment with the material. Young children are interested in feeling and playing with the clay. They rub, roll, squeeze, pound. Their use of it is like their scribbling with crayons or their playing with colors when they paint. They need this period of free manipulation of the clay before they are ready to make anything.

Next they are apt to roll out long "snakes" or make balls. At this point the grownup is tempted to say, "Let me show you how . . ." Showing takes away the child's freedom to learn in his way. The grownup leader may be sitting with the children, rolling or pounding, too, and helping them to enjoy the material, but she should follow their lead, not attempt to hurry their growth at this point.

Most children are 6 or so before they want to make anything that looks real. Once they start, they make figures of animals or people, houses, cars, and other things they know. At this stage it is the grownup's job to be interested and to appreciate the child's work, but not to ask him what it is, or to comment as to how real it looks. A child who is making a dog is not interested in the dog as the adult sees it. To him, a dog may be fearful thing (perhaps there is a big mouth with sharp teeth) or a very friendly creature. He will be putting his ideas into the clay. Let him do it his way, for they are his ideas.

Strong boxes attached to a wall make good display cases for clay creations.

If a child has worked hard on a clay creation he may want to take it home. With a small clay supply, the leader will have to limit taking things home to a very few especially good things or there will be no clay left.

Dry clay can be painted with poster paint. However, it is very fragile.

Most clay objects can be enjoyed for a while, then broken up, remoistened, and the clay used again.

If the clay supply is limited, save it for the older children. The little ones enjoy the substitutes just as much.

If you run out of clay, it is possible to make some substitutes which will serve almost as well:

Modeling Sawdust

This is best used by children at least 5-years-old. In feel and texture it is rough and rather unpleasant. Its great advantage is that it dries light and hard and once dry is almost impossible to break. It may be painted with poster paint when dry.

How To Make It

Mix wallpaper paste and water to the consistency of cream.

Sift sawdust in slowly, till the mixture is firm but pliable (the sawdust should be as fine as possible).

How To Use It

It can be used like clay.

It will not keep for any length of time, so it is best to make only as much as you expect to use right away.

Papier Mache

This is best used by school-age children.

How To Make It

Tear several sheets of newspaper into small pieces.

Put them into a container that will not rust and cover them with hot water. Let the paper soak overnight.

After the paper has soaked, shred it with the fingers and squeeze out the extra water. Add one of the following materials until the paper it firm enough to model:

flour
or
dry wallpaper paste
or
laundry starch

How To Store It

Keep it in a cool place. It will keep only a few days.

How To Use It

Model with it, as with clay. After a figure is finished, let it stand till it is dry. It can be painted with poster paint and coated with shellac or a plastic spray.

Modeling Dough

School-age children enjoy making small things from this material, which will harden into fairly permanent form.

How To Make It

Mix together:

1 cup of salt
½ cup of cornstarch
⅔ cup of water

1. Cook over a low flame, stirring constantly until the mixture thickens to a doughy mass.
2. Remove instantly from the heat.
3. Let it cool till you can handle it.
4. Knead in food coloring

How To Store It

Shape it into a ball, wrap it in waxed paper and store it in a covered jar in the refrigerator.

How To Use It

The dough may be modeled freely into beads, small dishes, and so on (see Figure 2). It is especially good for making Christmas tree ornaments. For these, roll the dough between two layers of waxed paper with a rolling pin, then cut into fancy shapes with cookie cutters. Make small holes through which to run yarn or cord for hanging. While still damp, the shapes may be sprinkled with artificial snow. Let dry several days, turning so that the pieces dry evenly.

1-2-3 Sugar Dough
(for birthday cake decorations)

How To Make It

Mix together:

1 tablespoon water
2 tablespoons sugar
3 tablespoons flour

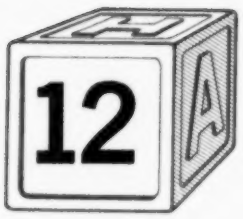
Knead in: vegetable coloring

How To Use It

This is especially good for making birthday candle holders. To make a rosette candle holder, pat out a strip of dough. Roll it up like a jelly roll. Push the candle in the middle to make the right sized hole and let it dry. When using the holders on a cake, push the candles through the top of the cake so they won't fall over when lit.

How to make a bead:
A Round ball
Stick in a Small Nail
Let the bead dry overnight on the nail.
How to make a candlestick:
Any shape
Stick a candle in the middle and let it dry.

Figure 2



About Paper

Working With Paper

Let your little ones cut and paste freely. Don't worry if they don't seem to make anything—they are enjoying and learning as they create their designs.

Encourage a group of your older children to make a paper mural (a big picture for the wall). Several children can work together and will enjoy both the sharing and the fact that it all gets done so quickly when a group goes at it. Tack a big sheet of heavy brown paper to the wall (as big a piece as you can get). Decide as a group what the picture will be about (something the children know well). Provide scissors, colored paper, and paste; then stay out of the activity as much as you can. Maybe a child will say, "But I don't know what a cow (or whatever he is making) looks like!" If that happens, show the child a cow if you can, or talk over with him what a cow is like—"Is she big? How many legs does she have? What color is she?" and so on. The leader's job is to be interested and encouraging, but to let the children do the work themselves. When the mural is finished, there will be a wonderful feeling on the part of the children that, as a group, they have made something really good.

Children who have not yet learned to use scissors easily can have wonderful fun tearing brightly colored paper into different shapes and pasting the shapes onto a background. Sometimes they can be given pieces cut into odd shapes by the group leader. Often they will use the paste very much like finger paint.

Older children can make an infinite number of things using paper. Only a few will be mentioned here. You can think of many other good ideas.

Because paste is essential for work with paper, a sensible place to start is with a good recipe for making paste for the day when Johnny drops the paste jar or the paste runs out.

How To Make Paste

Mix together:

½ cup of flour
cold water—enough to make a creamy mixture

1. Boil over a slow fire for five minutes, stirring constantly
2. Let cool
3. Add a bit of cold water to thin, if necessary

How To Store Paste

Keep in a cool place, in a covered jar.

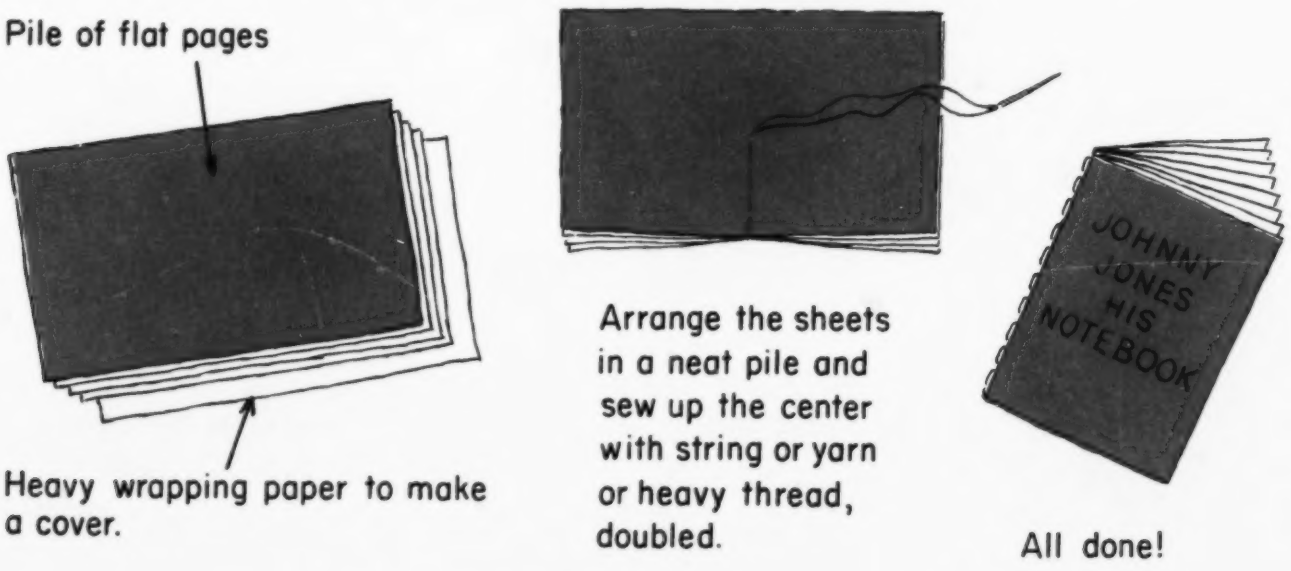
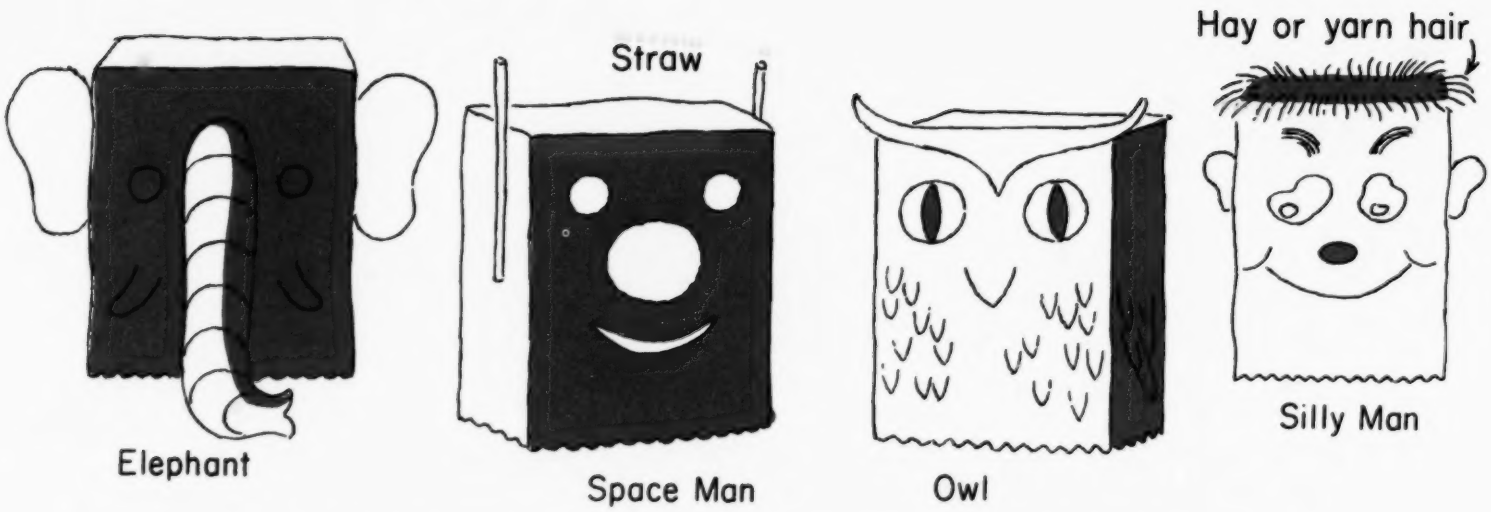

Pile of flat pages
Heavy wrapping paper to make a cover.
Arrange the sheets in a neat pile and sew up the center with string or yarn or heavy thread, doubled.
JOHNNY JONES HIS NOTEBOOK
All done!

Figure 3



Eyes cut out – features, feathers, etc. drawn or pasted on.

Figure 4

Materials You Will Need

Sheets of colored construction paper, old Christmas wrapping paper, or any brightly colored paper
White paper—lined and unlined, to make notebooks
Heavy brown paper—all sizes
Plain cardboard
Paper bags
Scissors
Paste
Needles and thread (for sewing the backs of books)
Almost anything else you can think of

School age children can make notebooks and scrapbooks. The pages can be sheets of brown paper if it is to be a scrapbook, or lined paper if the child wants to write on it (see Figure 3).

The younger children—nursery and young school-age—love to cut pictures from magazines and paste them in their scrapbooks. Sometimes they can make scrapbooks for still younger children.

Older children can make real notebooks that they can keep. A collection of recipes is a really useful thing for a child to own, and the making of it gives needed practice in writing as well.

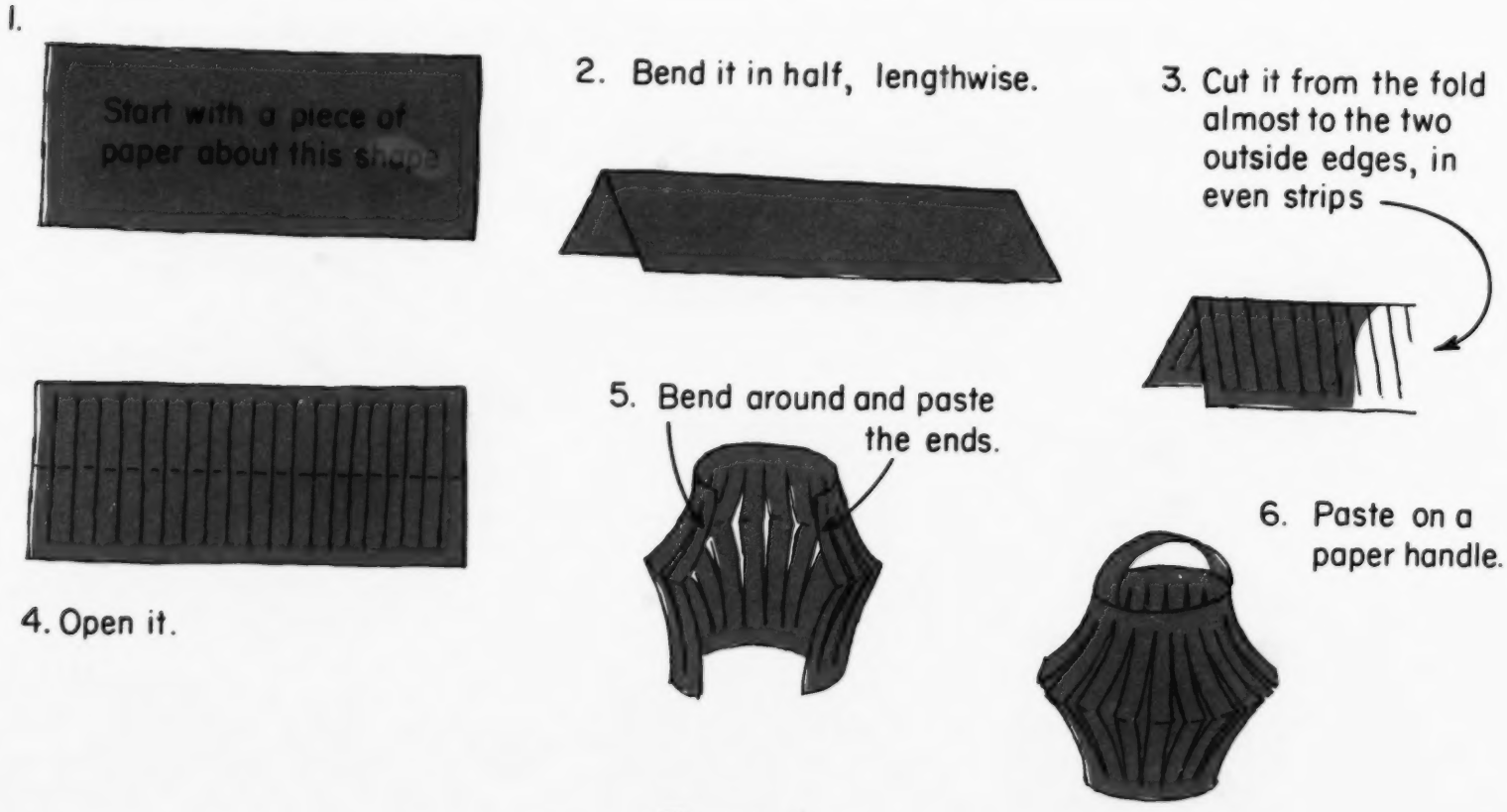

1.
Start with a piece of paper about this shape
2. Bend it in half, lengthwise.
3. Cut it from the fold almost to the two outside edges, in even strips
4. Open it.
5. Bend around and paste the ends.
6. Paste on a paper handle.

Figure 5

Save cardboard containers of all sizes—ice cream cartons, the round ones with covers, for example.

Wash them clean and let them dry. Shellac them or spray them or paste pictures on them and then spray them. Small containers make nice sewing kits or button boxes. Larger containers can be used for all sorts of things. It means a lot to a child to have a present to take home.

Big paper bags make wonderful masks! You'll need paste, scraps of yarn, paints or crayons, and construction paper. For each mask cut little slits or holes for eyes and nose. Let the children use their imaginations (see Figure 4).

Try making decorations for a birthday party. Placemats can be made from squares of paper, painted or crayoned. Paper lanterns are pretty but don't try to put a light in one!

Christmas decorations are fun. Make paper chains, for example. A paper chain is made of many strips of construction paper. Make them about three inches long and half an inch wide. Make loops by pasting the strips together, end to end. Hook each loop through the next one till you have a long chain.

Strip of colored paper

Figure 6

Christmas tree ornaments are easily made. Use brightly colored paper or silver paper (chewing gum wrappers are fine—silver paper must be pasted with rubber cement). The children can think of many more decorations.

Cover cardboard stars with silver paper, or with paste and dip in soap flakes for sparkle

Figure 7

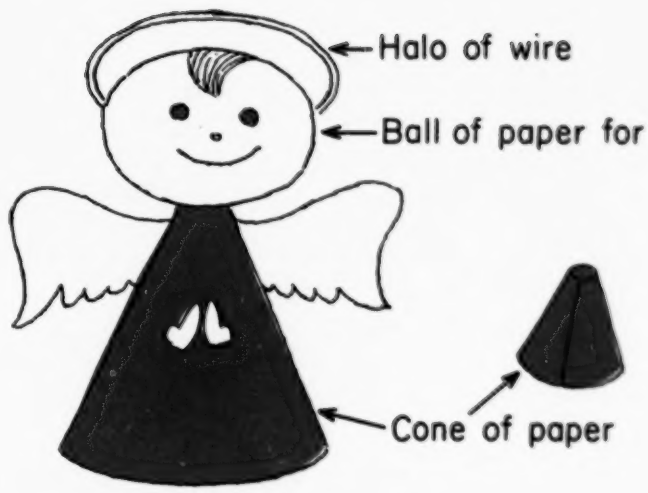
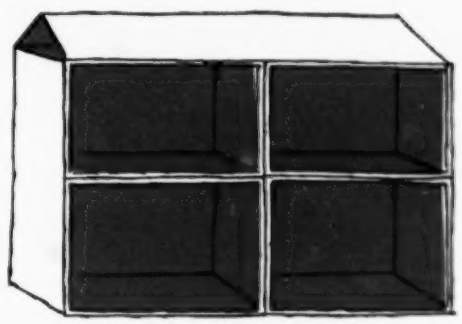


Figure 8

Cardboard boxes can be turned into doll houses and doll furniture, too.



Dollhouse... made out of four shoeboxes glued together

Figure 9

Ordinary paper plates can be used in various ways. Some children may enjoy making crayon designs, following the shape of the plate. These can be shellacked.

Two paper plates, one cut in half and turned front to front, can be sewn together, making a container for pot holders. They can be colored and used for special party plates.

Figure 10

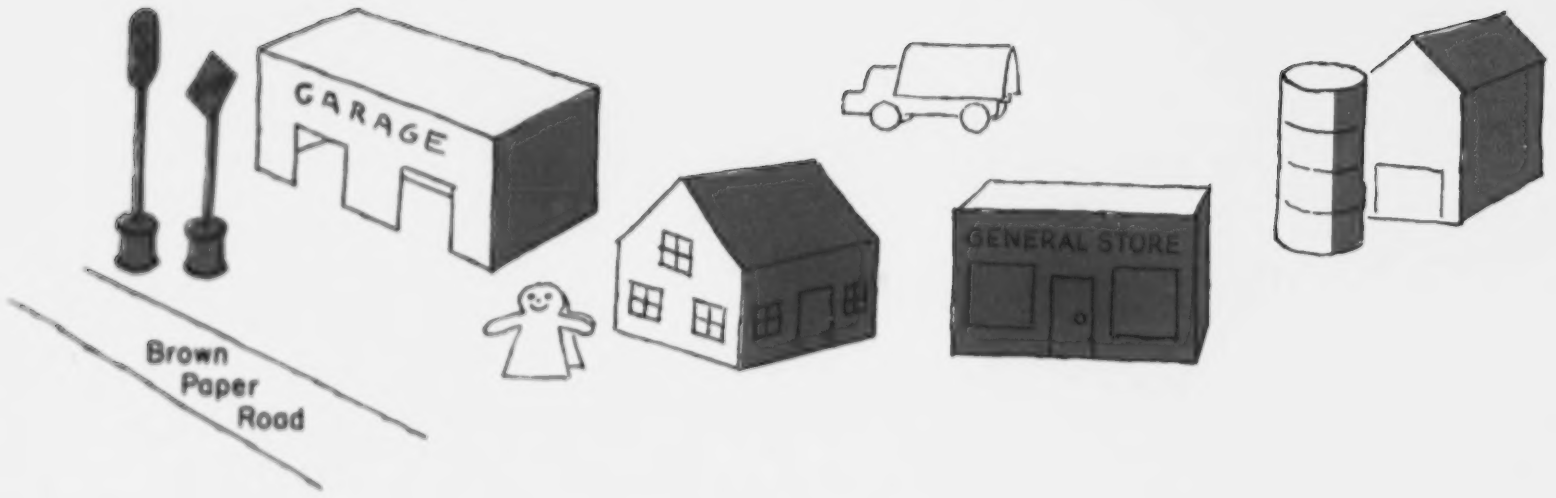


Figure 11

Use all shapes and sizes of paper and cardboard boxes for houses, stores, fire stations, barns, farms, etc. Make roads out of strips of brown paper. Make rivers and lakes out of blue paper. Make red and green lights out of paper on sticks, stuck in an empty thread spool. Draw and cut out paper people and animals to live in the toy country.

Let children experiment with printing on paper. Poster paint can provide the color. Many things can be used to print with: the end of a stick, a pebble, buttons, shells. Or, use a potato or a carrot, let the child cut a simple design in the smooth surface with a kitchen knife and use that to print.

If you can get some tissue paper, the children can make pretty wrapping paper by printing their design on the plain tissue paper.

Flowers can also be made from tissue and crepe paper.

Block Play

Block play allows great freedom of expression and through it a child may use his own skills and imagination to the fullest. There are many children who have never seen wooden blocks and do not know how to use them. The adult should introduce them carefully. Sometimes it helps if she uses them with the children at the very beginning. Children will soon begin to use the blocks independently and as they become interested the adult withdraws, returning now and then to comment on and appreciate the work.

Two- and 3-year-olds especially like to build a "tower" and then gleefully push it over. This should not disturb the adult. The building up and knocking down gives the child a feeling of power. He also gains a feeling of release. There are so many things in a small child's world that he mustn't touch, mustn't knock down, that it is wonderful for him to have something which can be pushed again and again, with a satisfying crash and no harm done.

As children gain more skill in the use of blocks they play together in groups of three or four, building houses, garages, farms, stores, and other structures which are familiar to them, using these for dramatic play. By the time a child is 5, 6, or 7, he is connecting these buildings with roads, tunnels and bridges and carrying on with his group of friends an active imaginary community full of vigor and excitement. Small trucks, cars, boats, and people will add to the development of this activity.

How To Set Up And Store Blocks

Blocks should be stored in a place that provides floor space for building, out of the direct line of traffic. If children's buildings are constantly knocked down or disturbed by people passing through, the builders will soon become discouraged and stop using the blocks. A sheltered area is essential.

Set up heavy boxes or accessible shelves for the blocks and arrange them neatly by sizes and shapes. Children will not build if the blocks are buried in a box. Older children can be helped to notice the differences in size and shape. Children who use the blocks should help in putting them away, though the adult may have to be the organizer at pick-up time, working with the children till the job is done.

At the carpentry bench children can make their own little cars, trucks, boats, planes, and other toys to use with the blocks. Be sure that the blocks themselves are not used as scrap wood. They are too valuable for that.

When space permits, it is good to leave an especially complex or well-built block building overnight. Its creators will come back to it the next day and carry the play further.

About Wood

Working with wood is exciting and valuable for children. Boys particularly respond to it. It gives an energetic child a chance to use his muscles, to work hard and to make something he can really play with and enjoy. To learn to use the basic tools correctly is to gain a skill that will be useful always.

Because the tools are real and therefore both sharp and dangerous, there are certain hard and fast rules about doing carpentry with children. Here they are.

1. A Grownup Must Always Supervise Children Doing Carpentry. This doesn't mean a grownup who is doing two or three other things. It means a grownup who is doing nothing but supervising the carpentry, with full attention to everything that is going on. It is better to have a few good carpentry periods, well planned and supervised, than to have frequent shop periods with the risk of accident and unhappiness.
2. Teach The Children How To Use The Tools Correctly. Impress on them that tools are not playthings. They are to be used carefully and safely. They are not to to be played with. Any child who forgets this basic rule and plays with a tool or threatens another person with it, should lose his carpentry privileges completely and instantly. He can have a turn another day, but for that day he is through.
3. Tools Should Be Used Only At A Strong, Solid Carpentry Table.
4. Hold Wood That Is Being Sawed In A Vice Or A C-Clamp.
5. Have A Place Where Tools Are Kept And See That They Are Returned When Not In Use.

Ages

Five or 6 years-old is about the right age for children to begin carpentry.

Younger children (5s and 6s) or those who have had no experience with carpentry go through a period of experimenting with the materials. They like to bang nails into wood and perhaps fasten one piece to another. They saw for the fun of sawing. They make strange nailed-and-sawed things and call them this or that. All this is fine, and so long as they are happy doing it they should be allowed to, just as they experiment with other materials in a free way.

Older children want to make something that looks real. They are ready to be taught. On the next few pages are suggestions for making simple things which will satisfy a school age child.

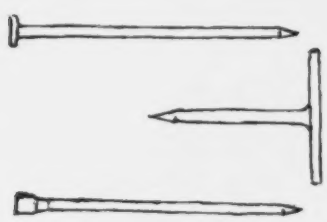
Boards

Boards about ¾ inch thick and 3 to 8 inches wide, of soft wood such as pine are best if you can get them. Buy odd chunks from a saw mill for a few cents. The grain of the wood should run the long way of the object. Otherwise, it will split.

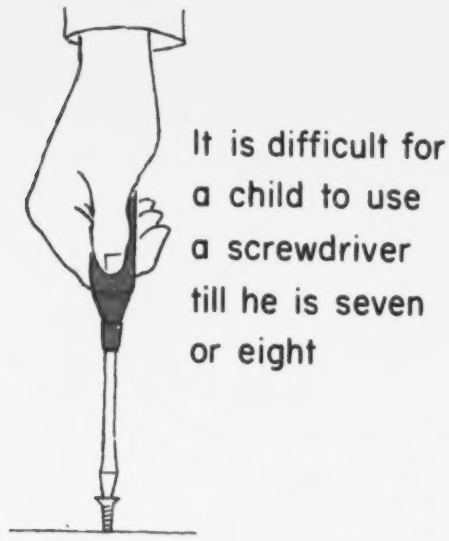
Tools

Hammer. Pick up the hammer as if you were shaking hands, and hold it near the end of the handle. Use the flat part of the hammer head to hit the nails. Use the claw part to pull out bent nails.

Nails. Ask for four penny nails, roofing nails, finishing nails.

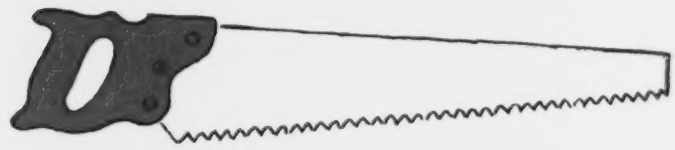


Screwdriver. Hold the palm of your hand over the top of the screwdriver handle so it won't slip out of the screw. You can use a screwdriver like a chisel to knock out wood between two saw cuts. It is difficult for a child to use a screwdriver until he is 8 or so.

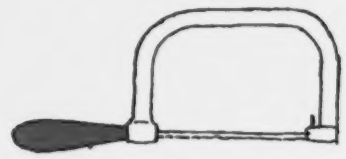


Saw. You may have an all-purpose saw. This will saw in any direction. If you have a cross-cut saw (small teeth, set at an angle to the saw blade so they feel rough when you run your fingers along the side of the saw) it is for cutting across the grain of the wood. A rip saw (with bigger and smoother teeth) cuts in the same direction that the wood grain runs.

When sawing a board, clamp it tightly and use your left hand to hold the piece of wood that is to be cut off, so it doesn't split. Guide the edge of the saw with the knuckle of your left thumb.

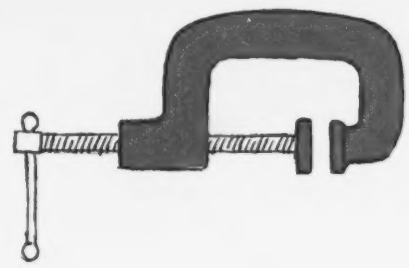


Coping or Jig Saw. The coping saw will cut curves that can't be cut easily with a straight saw. Clamp the wood firmly and saw with short, even strokes. The blade will break if the saw is twisted or bent suddenly. Put in the blade with the points facing down.



Sandpaper. It comes in three grades—fine, medium, and coarse. Medium is the most useful for children. When an older child takes pride in his things, he is ready to sand them smooth. Bend sandpaper in a straight crease before tearing off a small piece. Thumbtack the piece to be used on a small wood block.

"C" Clamp or Vise. The easiest and safest way to hold a piece of wood firmly to the table is with a clamp or vise. Be sure it is tight. A big piece of wood will need two clamps. This prevents fingers from being sawed.



"L" Square. Use an "L" square to draw straight lines for sawing. Hold one arm of the "L" square against the edge of the board. Draw your line along the other arm. Don't let it slip.

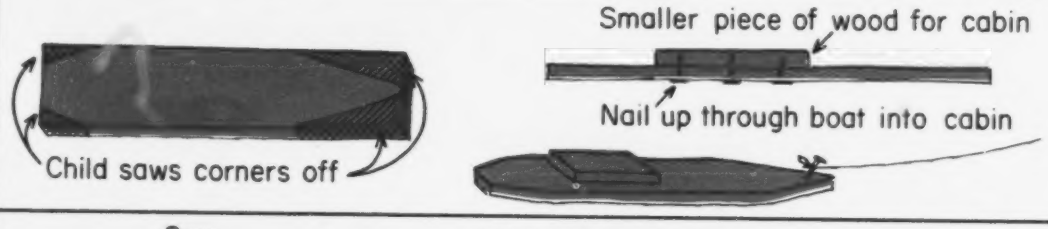
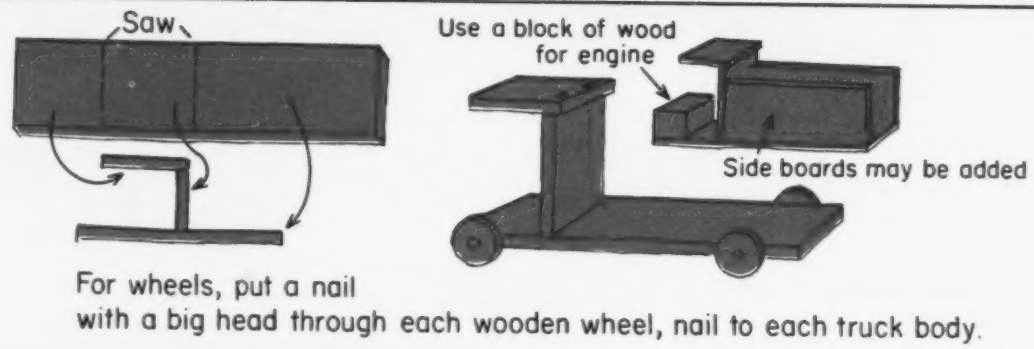
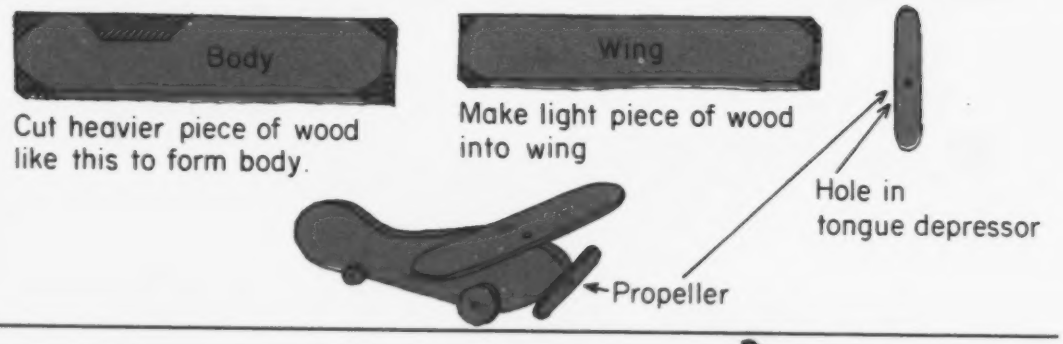
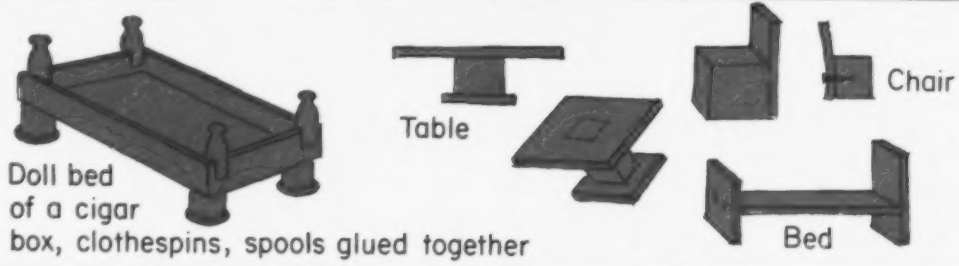
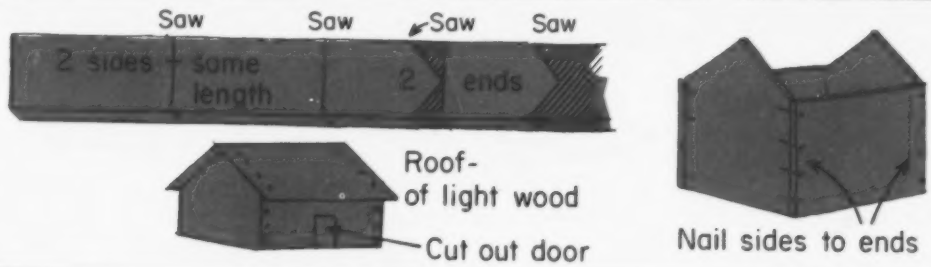
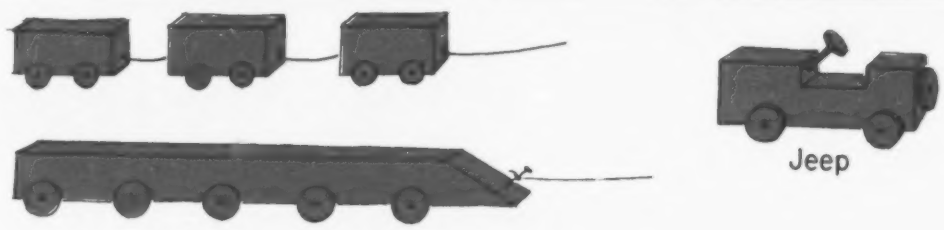
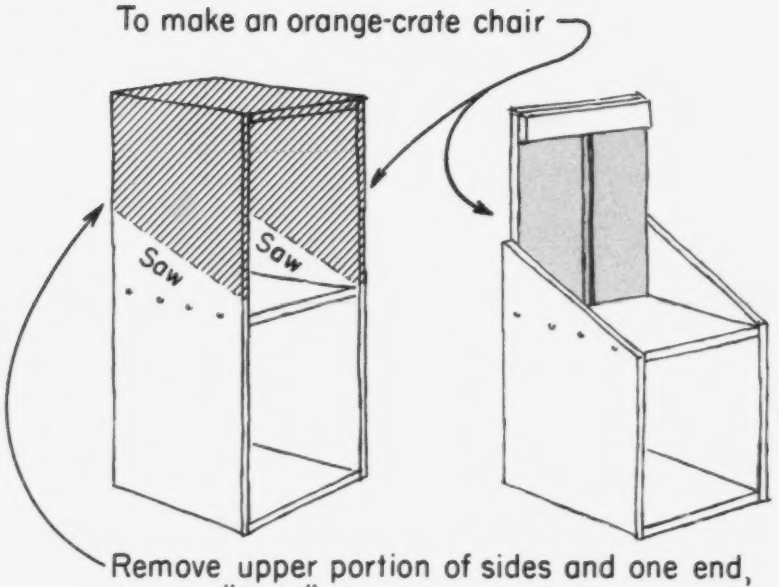
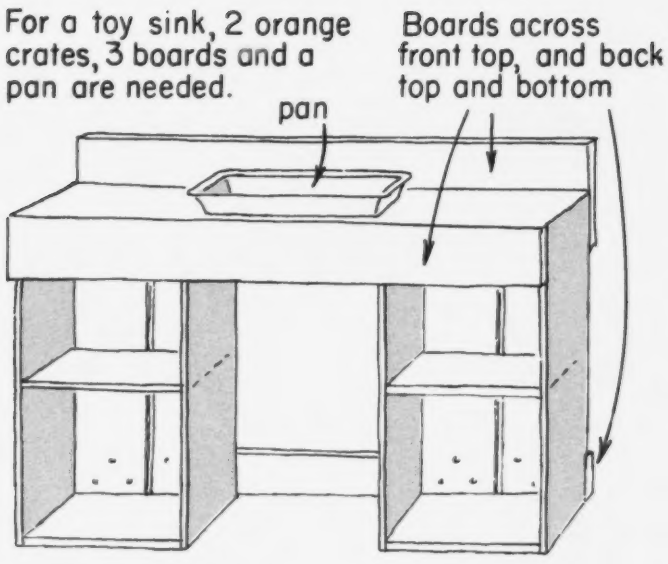
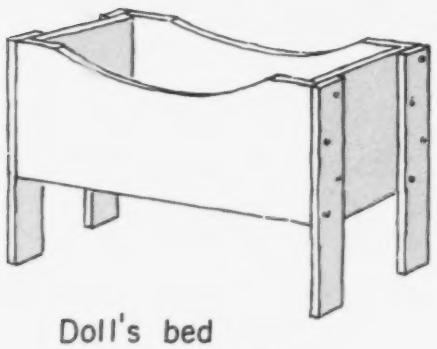
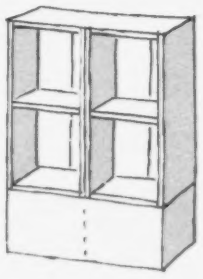
Materials needed:	
BOAT: One long board One smaller piece Nails	
TRUCK: One or more boards Thick piece of wood for the engine Four wooden wheels Nails Wooden wheels	
AIRPLANE: Two boards – one quite thin A tongue depressor Wheels Nails	
TOY FURNITURE: Scraps of wood Spools Clothespins Nails – Glue	
HOUSE: Long board Two pieces of thin board for the roof Nails	
PULL TOYS: Scraps of wood– long square pieces Nails – Glue Wheels – String	

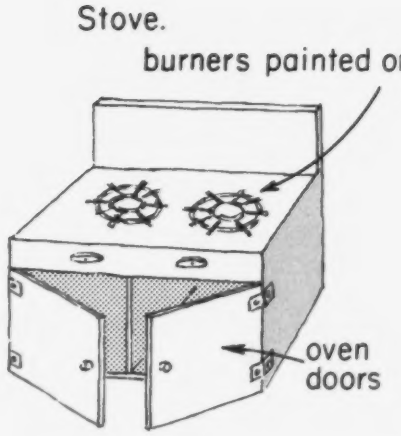
Figure 12

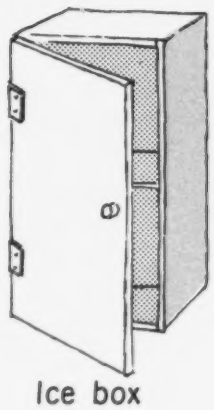

To make an orange-crate chair
Saw
Saw
Remove upper portion of sides and one end, leaving "back". A cloth cushion may be made, and can be tacked on.

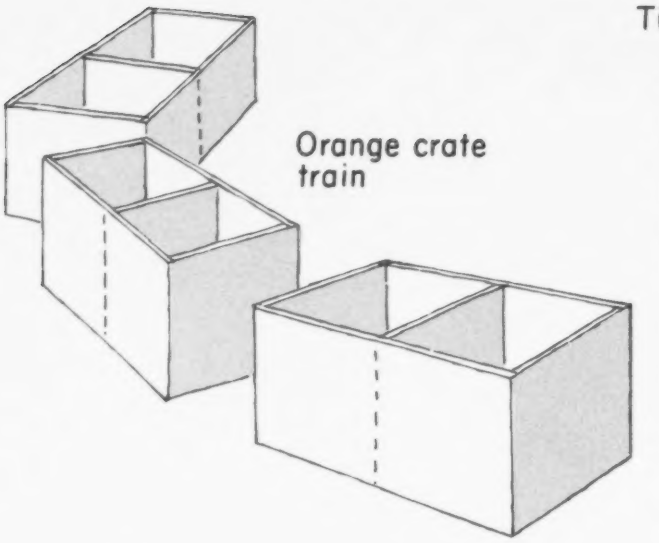



Doll's bed
from an apple box.


Cupboard
(3 orange crates)




Ice box



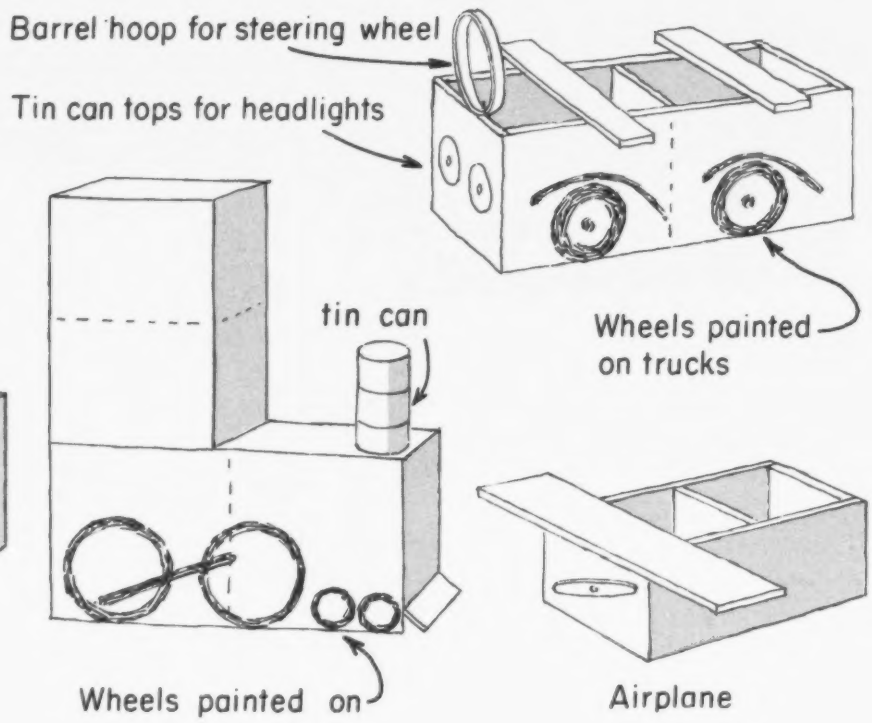


Figure 13

Materials

Apple boxes, orange crates, and other wooden boxes which can be picked up at local stores make wonderful child-size furniture for housekeeping play. Or make them into trains, airplanes, trucks, boats for dramatic play (see Figure 12 and Figure 13).

Kites

The older children can have fun with kites. To make a kite you'll need:

Thin, strong paper (or cloth)

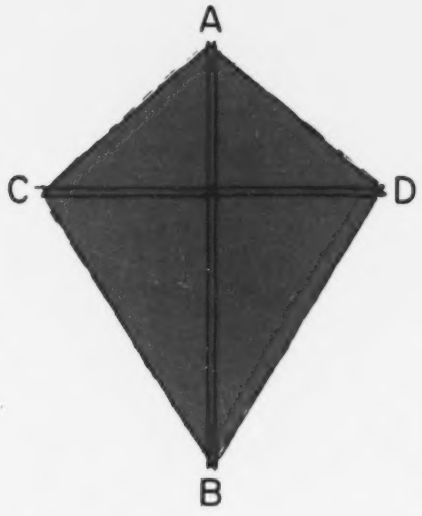
String

Glue

Two ¼ inch dowels or thin, straight sticks

In the illustration the solid line indicates a dowel or stick and the dotted line indicates the outline string.

Cut dowel A - B 36 inches long and dowel C - D 30 inches long. Apply glue where the sticks cross and lash them together with several windings of string. Let the glue dry.



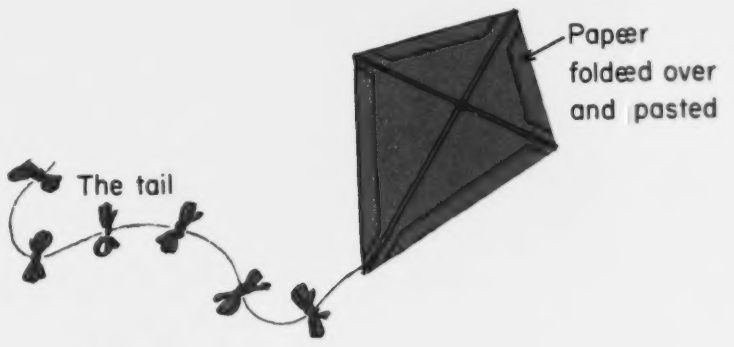
Next, notch the end of each stick, as shown in the illustration.

Make a little groove all around the end of each stick about half an inch from the end. Run string around and through these notches to form the outline of the kite, as the pattern shows.

Place your kite frame on the floor on top of the paper. Cut the paper to fit the frame, leaving a two inch margin all the way around. Decorate your kite with a picture or some gay colors. Fold the margin of paper over the frame and glue it tightly in place. Press it with something heavy until it dries.

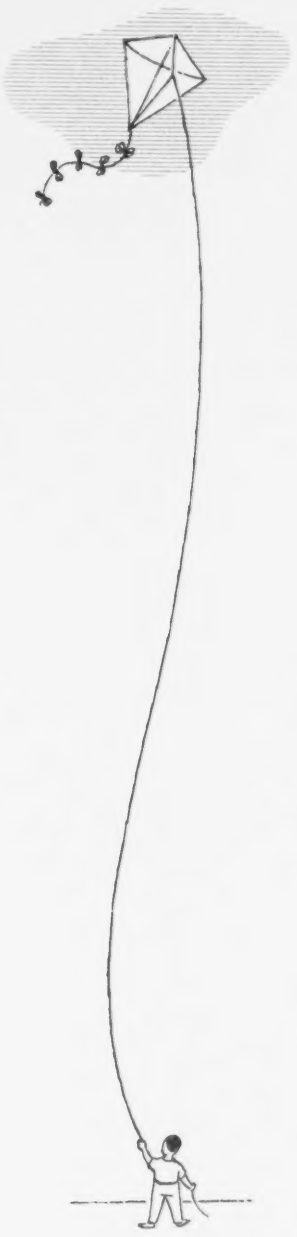
Cut a piece of string about 40 inches long for the bridle string. Fasten it at points C and D.

Make a tail. Use a piece of string 12 to 15 feet long, with pieces of cloth about six inches by two inches tied at one foot intervals all the way along. Fasten the tail two inches away from the base of the kite (B) by tying it to the piece of dowel stick.



Adjust it for the strength of the wind—a short ttail for a light wind, a longer tail for a heavier wind.

Tie your long flying string at the center of the bridle string and your kite is ready to fly.



About Cloth

Scraps of cloth are almost always available and all sorts of things can be made from them.

School-age children, often both boys and girls, but particularly girls, like to work with cloth. Learning to sew is a genuinely useful thing for, like carpentry, it is something they will use all their lives. The leader should remember that sewing is a very difficult and tiring thing for young children. They will need help in threading the needle and making a reasonably small but firm knot. They should be taught a few very simple stitches—the running stitch, how to baste and to overcast, the backstitch, how to finish off, how to make a hem. The adult should be with the group all the time, to help thread needle, to undo tangles, and to keep things going. The first stitches will be huge, but the important thing is to have the children enjoy their work while they learn the craft.

Encourage the children to use thimbles. It is easier for them if they get the thimble habit in the beginning. The thimble fits on the middle finger and helps push the needle through the material.

Threading The Needle

Hold your hand steady by supporting one hand with the other as you thread the needle. Thread should be no longer than the child's arm length, otherwise it will tangle.

Making A Knot

To make a knot the size of a pin head instead of a bullet, hold the threaded needle with the right hand. Wind one end of the thread around the tip of the forefinger of the left hand. Twirl with the thumb several times and push the thumb forward. Slip the forefinger out of the loop and with the middle finger and thumb, pull down on the loop to make a knot.

Running Stitch

This is made by running the needle in and out of the cloth in a straight line. The length of the stitches and

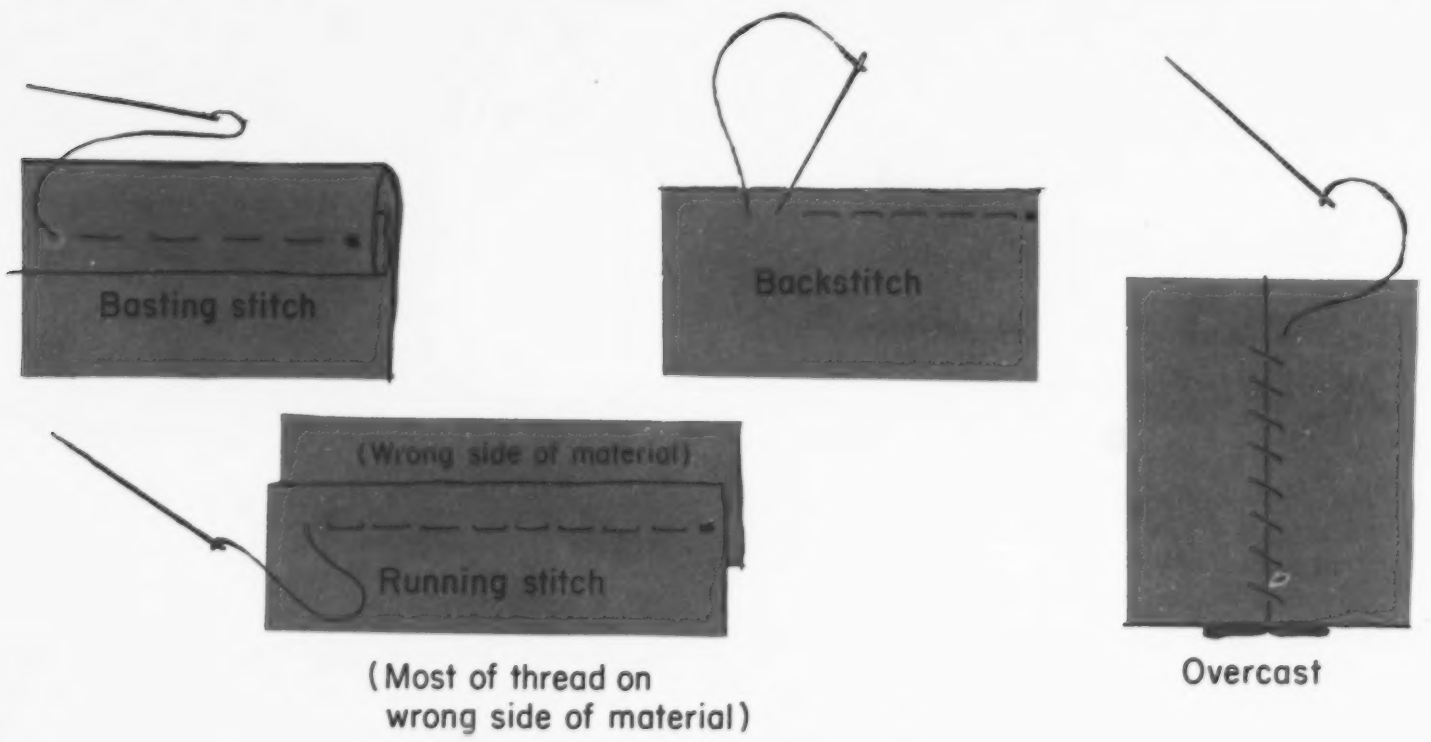


Figure 14

the space between them should be the same. To gather the material, use the running stitch and a strong or a doubled thread and pull the thread tight when you are finished sewing (Figure 14).

Basting

This is a large running stitch. Use this to hold the material in place while the final sewing is being done. When the work is finished, take out the basting threads (Figure 14).

How To Overcast

Use this stitch to prevent edges of seams from raveling. This is also used to join two pieces of material on the right side. Sew from right to left and slant the stitches slightly (Figure 14).

Backstitch

Use this stitch when you want to put two pieces of material together firmly. Take a stitch back and bring the needle forward the length of one stitch from where you started (Figure 14). Now make another backstitch, meeting the last stitch, and bring the needle forward one stitch.

How To Finish Off

Sew over and over the same place. Children often sew until no thread at all is left. Show them why they should leave a couple of inches of thread for finishing.

Making A Hem

There are three easy steps in making a neat, even hem:

1. Fold the raw edge over to the wrong side about a quarter of an inch and crease it firmly with your finger.
2. Fold again to whatever width you want your hem. Baste the edge down after the second fold.
3. Slipstitch the hem in place. To do this, pick up about three threads of the material with your needle and on the same needle pick up three threads of the folded edge. Keep the needle slanted to the left. Try to have the stitches all the same size and all the same width.

(Younger children can use the running stitch to fasten the hems. Even though the stitches will show it doesn't matter for beginners.)

Materials You Will Need

In sewing boxes you should place the following materials:

Needles
Thread
Thimbles
Rick-rack braid
Emery bag (for cleaning rust from needles)
Tape measure
Pin cushion and pins
Sewing scissors

Some Simple Things Children Can Make

It is important to start with simple things which children can finish quickly and enjoy. Remember that sewing is hard work for children.

Skirts

Older girls may learn to sew well enough to be able to make skirts for themselves. This would be both useful and exciting for them.

Two yards of 36 inch material (quite closely woven, preshrunk cotton is best) will be enough for most school-age children.

First, cut a strip about five inches wide from one end of the cloth. This will be made into the waistband.

Fold the remaining cloth in thirds and cut into three pieces.

Sew the three pieces together. (This gives a longer piece for the skirt.)

Gather the skirt at the top, using a double thread or a heavy thread. Make two rows of gathers, one a quarter of an inch above the other.

Measure the child's waist to see how long the waistband should be and sew the gathered side of the skirt into it.

To sew on waistband, fold it in half, and turn under rough edge of front side.

Sew this to the gathered side of the skirt on the "right" side of the goods. Bend it over and do the same to the "wrong" side. Finish off the ends.

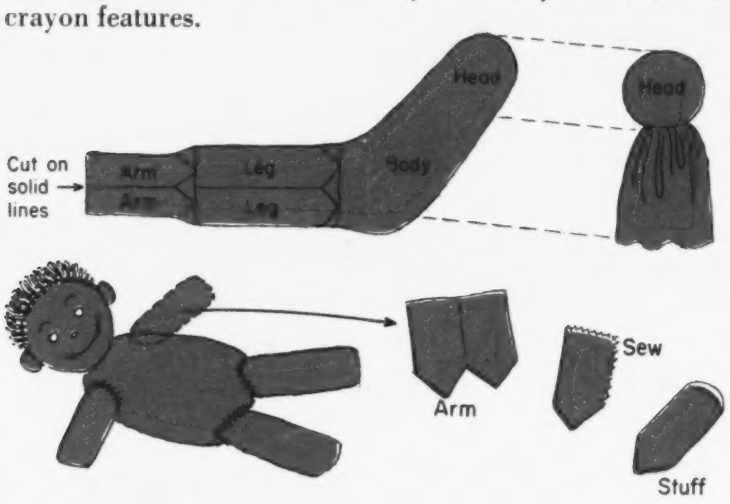
Sew the skirt up the side, leaving a long enough opening so that it will not tear when the child puts it on. Fasten with hooks and eyes (these are secure and easy for children to sew on and to use).

Hem the skirt at the correct length.

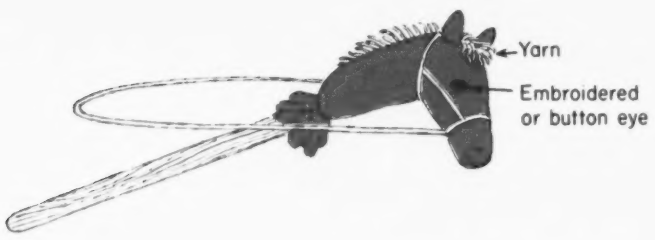
Toys

Fine toys can be made from men's socks. Sammy Sock Doll, for instance:

Sammy Sock Doll: Cut the sock like the pattern shown. Take the body piece and stuff the toe firmly with cotton, scraps of cloth, old stockings, etc. Tie with string. This makes a round head. Stuff to the heel of the sock. Turn under the cut edge, lap over, and sew. Turn the arm and leg pieces wrong side out and sew up the seams. Then turn them right side out and stuff them. Turn under the raw edges and sew to the body. Make yarn hair and crayon features.



A sock horse: Stuff the sock full of cotton, scraps of rag, old nylon stockings, etc. Push the end of a broomstick well up through the stuffing. Tie the opening at the cuff of the sock and tack it to the broomstick. Make cloth ears. Sew on button eyes and use ribbon or string for the reins.



Potholders

Children can make useful potholders out of strips of cloth braided together. Take three long strips (different bright colors) and sew them together at one end. Braid them, sewing in other strips as needed. When the braid is long enough, sew it around and around, like a tiny rag rug. Sew on a curtain ring so it can be hung.

Beanbags are fun to make and to play with. The simpler the better!

Decorating Cloth

Children can decorate cloth by drawing on it with crayon. If the crayon is ironed with a warm iron (put the cloth between sheets of clean paper so it won't stain the ironing board cover), the crayon will sink in. Then the cloth can be washed without having the color come out. Curtains, place mats, puppet costumes, and many other things can be decorated this way.

Crayon drawings that have been made on paper may also be transferred to cloth this way. Have the children draw very solidly and heavily on the paper. Lay it, crayon side down, on the cloth, cover it with another piece of paper, and iron it. Be careful not to let the crayoned paper slip.

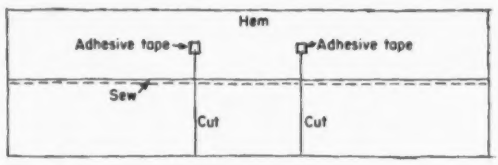
A Scroll For House Play

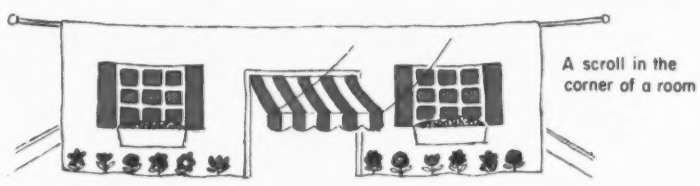
This is usually made by the adults for the children, though older children could help make one for the smaller children.

Sew two lengths of unbleached muslin together. This will give you a piece of material six feet high, and as long as the corner of the room you wish to establish as the doll corner.

Cut out a door in the middle (an awning may be made from the cut-out piece). Cut out windows. The edges and the cross bars may be reinforced with adhesive tape. Paint it with poster paints (when these get smeared and dirty the whole scroll can be washed and repainted). Sew a hem at the top and run a clothesline through it. Hang it up in your room from corner to corner, with the doll furniture in the "house" behind it.

Scrolls can be made for stores, firehouses, etc., and used outdoors. For store play, collect food boxes of all kinds, bottles, etc. Use orange crates as counters. The children may enjoy playing with toy money.

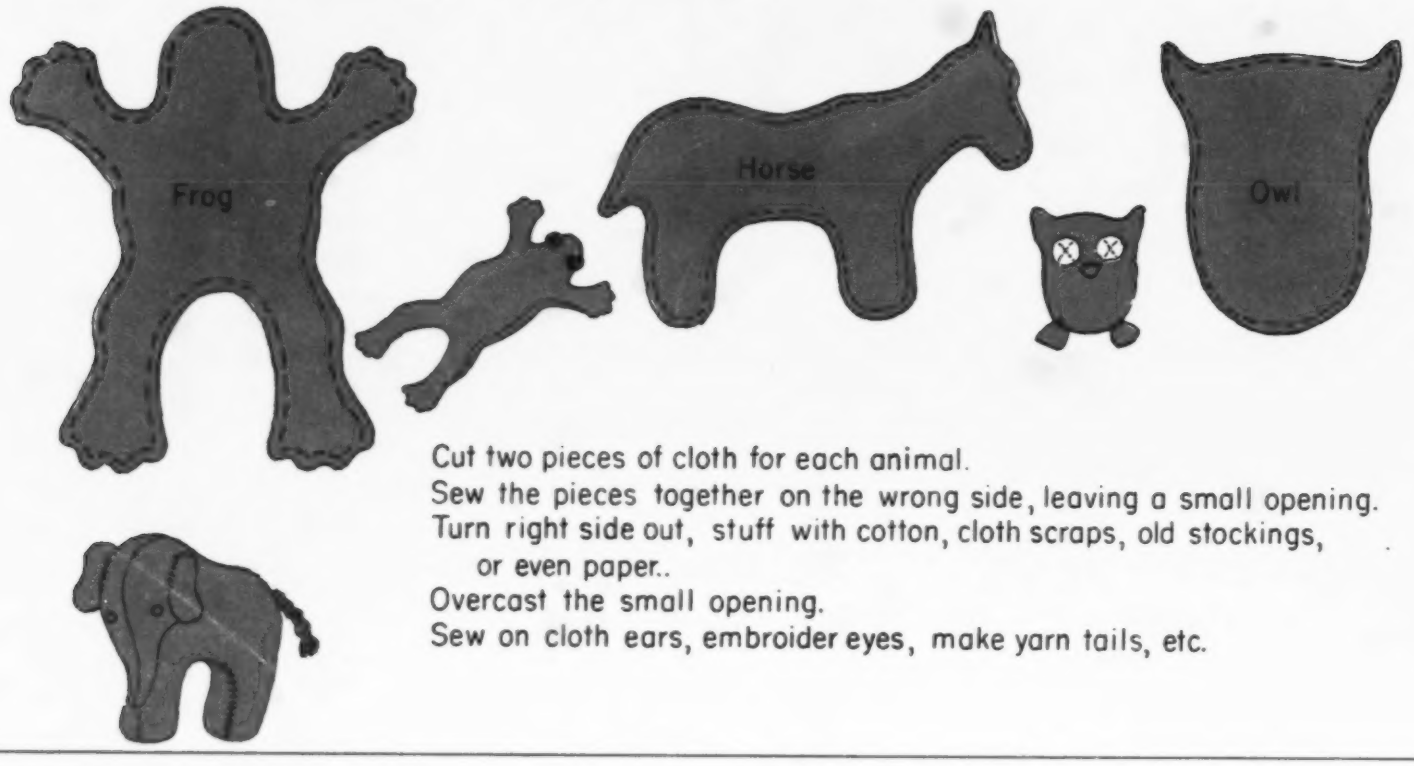




A scroll in the corner of a room

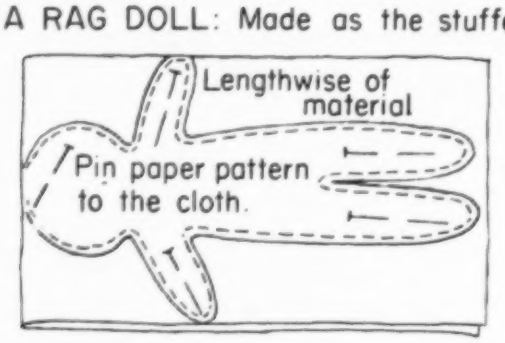
STUFFED ANIMALS:

Draw a paper pattern the right size. Use any simple animal shape.



Cut two pieces of cloth for each animal.
Sew the pieces together on the wrong side, leaving a small opening.
Turn right side out, stuff with cotton, cloth scraps, old stockings, or even paper..
Overcast the small opening.
Sew on cloth ears, embroider eyes, make yarn tails, etc.

A RAG DOLL: Made as the stuffed animals are made.



Yarn braids are sewn over head.

Features may be embroidered or drawn with crayon or paint.

Girls love to make dolls' clothes. They can make their own simple patterns, which should be big enough to allow for sewing on the wrong side and turning over.

POTHOLDERS:

Cut several layers of wool or flannel cloth. Sew with bright yarn.

Sew on a curtain ring to hang it by.

A useful present to take home

Figure 15

About Puppets

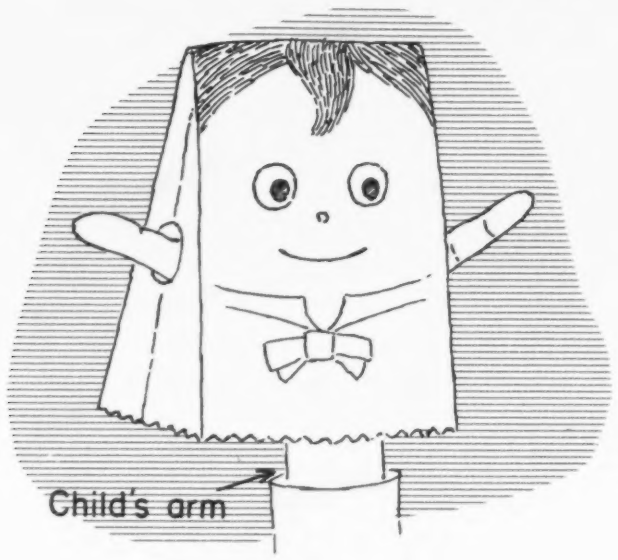
Even the simplest puppets are too difficult for all but the oldest school age children. Given a group of 9- or 10-year-olds, however, fun can be had making puppets and putting on simple plays. The younger children will be a fine audience.

Here are two varieties of very simple hand puppets:

Paper Bag Puppets

Start with rather small paper bags—big enough for the children to put their hands in comfortably. Use colored paper and paste or crayons or paints to put on features. Make the hair of yarn.

A hole cut in each side of the bag lets the child stick his thumb and little finger out on either side to act as arms. The hand and arm make the puppet move.



Cloth Puppets

Use odd pieces of cloth. Double the cloth and cut in the shape of the puppet. Sew around the edges, leaving the bottom open. Turn the puppet right side out. Stuff the head with cotton to give it some thickness. Paint or crayon on the clothes and features. The thumb and little finger work the arms, while the hand and arm make the puppet move.

Staging A Play

A tipped-over table makes a good simple stage. Or make a stage from a big cardboard carton. Or use orange crates for a really fancy stage (see Figure 16).

In planning a puppet play, decide first what puppets you will make. Either plan to act out a story the children know well and have heard many times (this is simplest) or make people from the children's own experience—father, mother, grandmother, other children. Don't try to have the children learn parts. When the puppets are made, let the children experiment with them, having them "talk." Gradually the children will work out their own parts and will really understand what they are doing. They will need several days of playing with the puppets before they are ready to do a play for anyone else to see. Results will be very simple and crude, but the aim is to have the children enjoy playing out a story and learn to put themselves in other people's places through the use of the puppets.

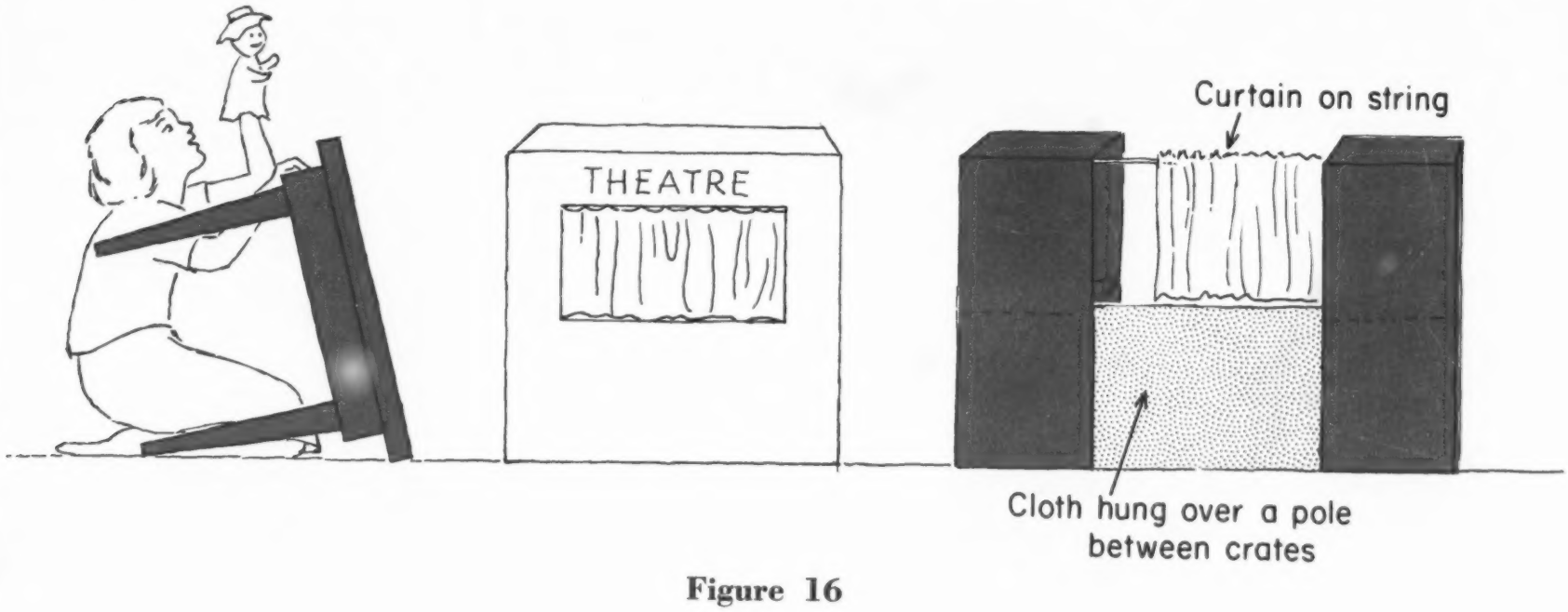
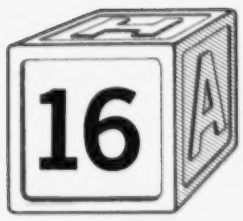


Figure 16



Rhythm Band

Both pre-school and school-age children can have wonderful fun making a rhythmic accompaniment to simple songs which they can sing as a group. Try staging a "parade" with the instruments after you have used them a few times.

Instruments

Here are some simple instruments anyone can make or find:

Rattles

Partially fill oatmeal or other small boxes with rice, beans, small pebbles. Fasten on the cover with adhesive tape. Paint it brightly.

Partially fill empty beer cans with small pebbles, or seeds, etc. Put adhesive tape over the holes in the cans. Shake the cans in time with music.

Cymbals

Use old kitchen pot covers. Bang them together in time with music.

Drums

Cover an old wooden mixing bowl or a wooden nail keg with tightly stretched rubber from an old inner tube. Cut the rubber 2½ inches bigger than the hole. Have two grownups stretch it tightly over the opening while another tacks it all around the edges. The child taps on the rubber with his hands. It makes a booming sound.

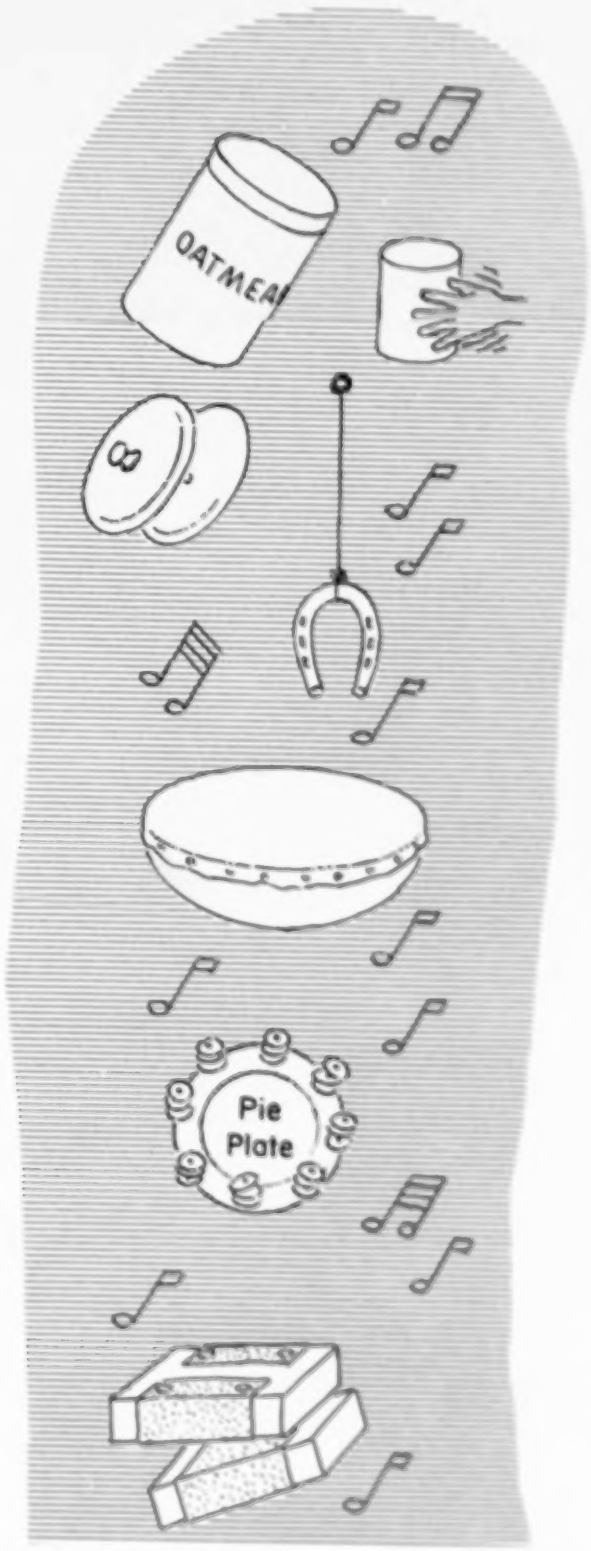
A small drum may be made by securing a piece of balloon over an oatmeal box with a rubber band.

Tambourines

Make holes about every two inches around the outside edge of an old tin pie plate. Collect two or three dozen old metal pop bottle tops. Take out the cork inner layer and pound the tops flat. Make holes through them with a nail. Attach the bottle tops to the holes in the pie plate, several at each hole, using string or fine wire. Make them loose enough so they will hit against the pie plate and rattle.

Sandpaper Blocks

Cover small scraps of wood with sandpaper, thumbtacking it on the backs of the blocks. A child can rub these blocks together in time with music.



Rhythm Sticks

Smooth, sanded sticks hit together in time make a nice sound.

Harmonica

Combs covered with waxed paper are blown over or hummed through.

Bells

Buy a few inexpensive bells at a variety store.

Musical Washboard

Thimbles on the fingertips, rubbed or tapped over a washboard or piece of corrugated metal make a gay dancing sound.

Chimes

Children can learn a lot about sounds by filling glasses or pop bottles with water to different depths. By careful listening and filling each glass a little more than the one before, the notes of the scale may be reproduced. Tap the glasses gently with a spoon. There will be a musical, tinkling note. Tunes may be played on the musical glasses.

Activities

Children love musical activities and respond to them. These can include:

Prancing, skipping, walking, running in time to music.

Singing games.

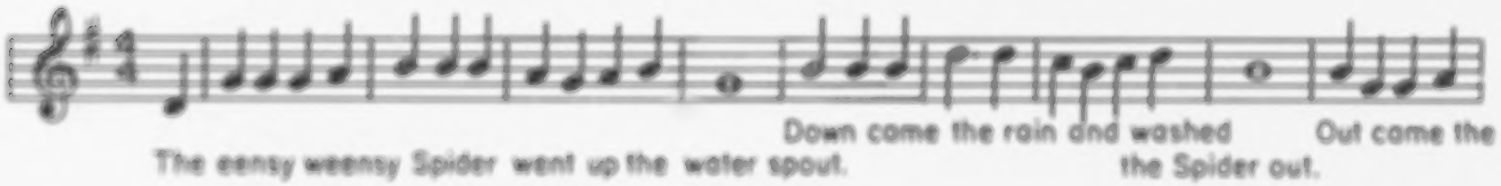
Simple square dances.

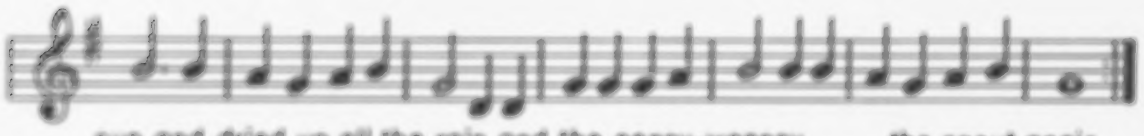
Singing songs together.

Many children know songs, singing games, and simple folk dances that they will sing or do spontaneously when they are outdoors. Listen for signs of these, encourage them, and use them in getting musical activities started in your group.

Here are a few singing games and songs as a start:

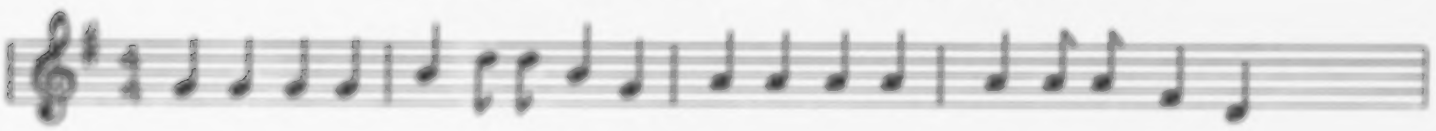
The Eensy-Weensy Spider – Action Song

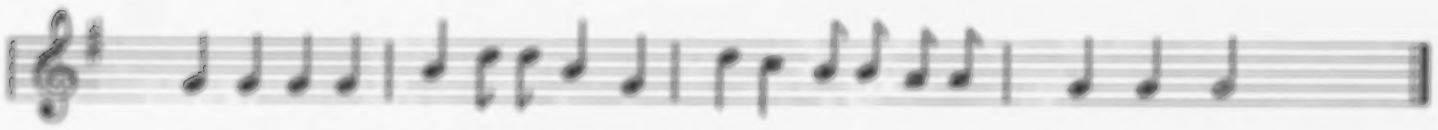




Children move their fingers up, then down, with the music.

Paw-Paw Patch – Singing Game





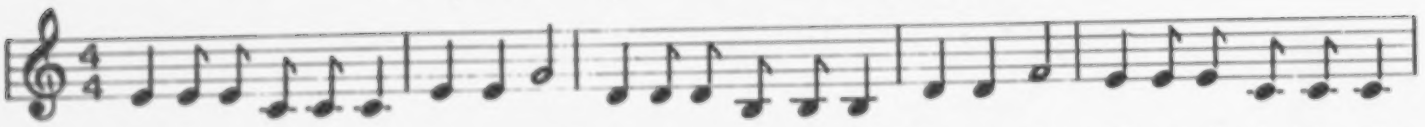
2) Pickin' up paw-paws, Puttin' em in her basket, (etc.)

3) Come on, boys, let's go find her (etc.)

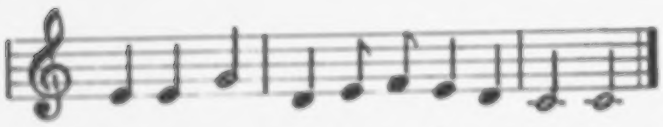
4) That is where I found my Susie (etc.)

The dancers form a circle around one member, who acts out the words of the song. At the end of the last verse, the person left in the ring chooses a new "Susie" and takes her place, and the dance goes on.

Skip to My Lou - Singing Game



1). Flies in the buttermilk, two by two. Flies in the buttermilk, shoo fly shoo. Flies in the buttermilk,



two by two, Skip to my Lou, my darling.

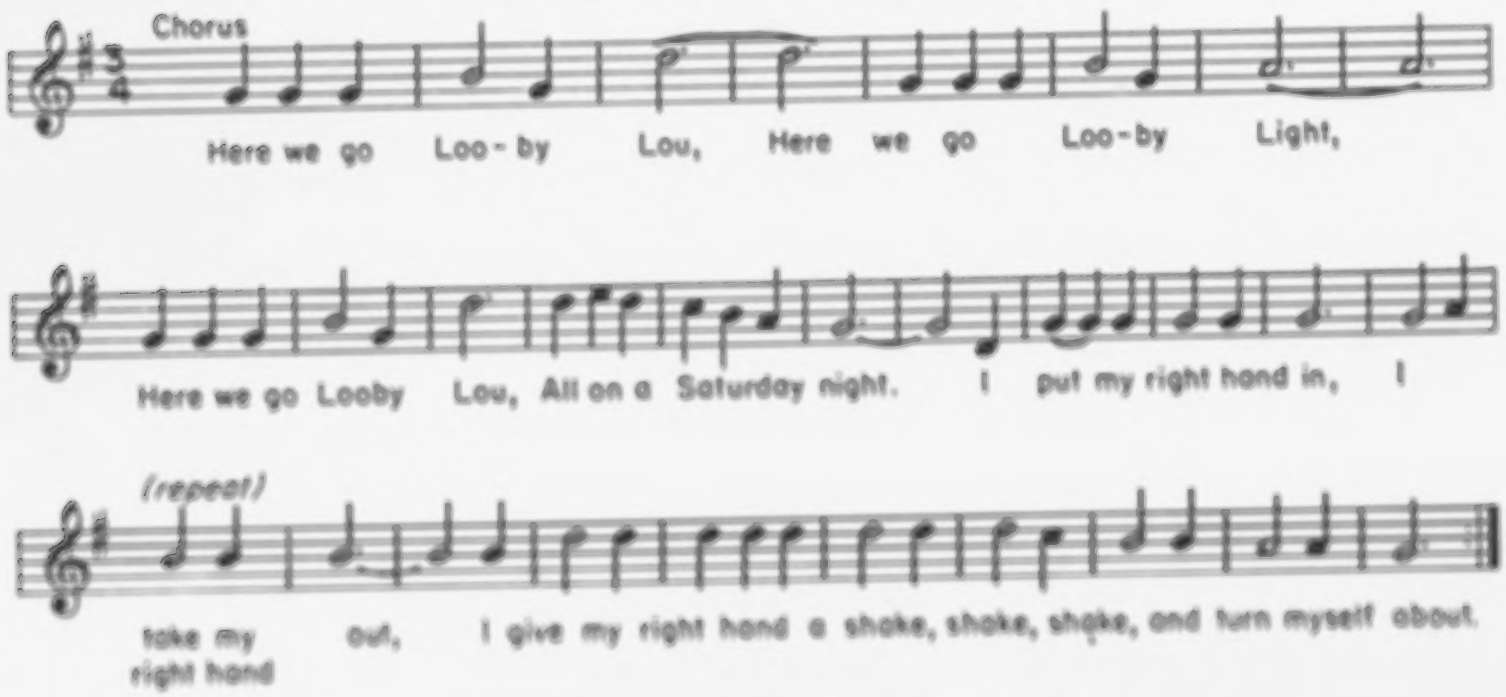
2). Little red wagon, painted blue. (etc.)
3). Dad's old hat got torn in two. (etc.)
4). Can't get a redbird, a bluebird'll do. (etc.)
5). She is gone and I'll go too. (etc.)
6). Get me another as pretty as you. (etc.)
7). Cat in the cream pitcher, what'll I do? (etc.)

Formation: After choosing partners, the players form a large circle.

Figure: One couple steps into the ring and chooses one other person. The three hold hands and skip about the circle. The couple stops and holds joined hands high while the third person, on the word, "Skip" steps under the arch thus formed. The couple joins the circle, and the person left in the ring calls in another couple and takes one of the new members for a partner. Together they make the arch and join the circle, leaving alone in the center the other new member, who then chooses another couple, and so on, to the end of the song.

("Lou" is an old dialect word for sweetheart.)

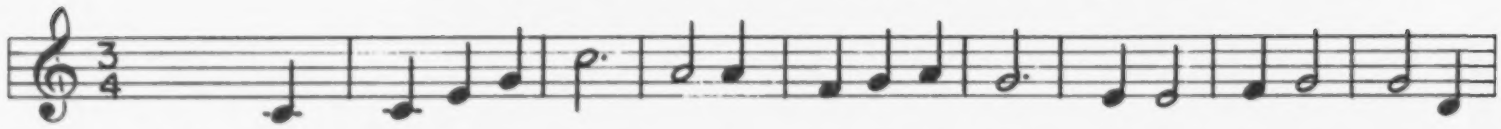
Looby-Lou – Singing Game


Chorus
Here we go Loo-by Lou, Here we go Loo-by Light,
Here we go Looby Lou, All on a Saturday night. I put my right hand in, I
(repeat)
take my right hand out, I give my right hand a shake, shake, shake, and turn myself about.

2). I put my left hand in, (etc.)
3). I put my right foot in, (etc.)
4). I put my left foot in, (etc.)
5). I put my whole self in, (etc.)

Game: All join hands in circle and walk to right while singing the chorus. On verses, stop and follow directions, such as putting the right hand into the circle, etc.

On Top of Old Smoky - Song



by courting too slow.

2). Now courting is pleasure and parting is grief,
But a false-hearted lover is worse than a thief.

3). For a thief, he will rob you, and take what you have,
But a false-hearted lover will send you to your grave.

About Tin Cans

Tin cans which have been opened with a can opener which turns the edges under smoothly are safe and can be made into a great number of useful containers and toys:

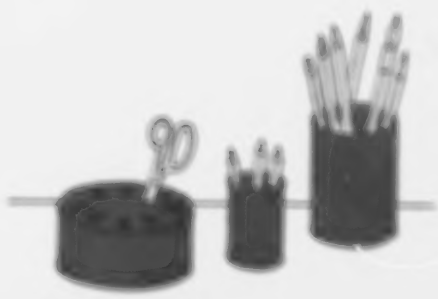
Sprinklers

Punch several holes in the bottom of a can.

Storage Cans

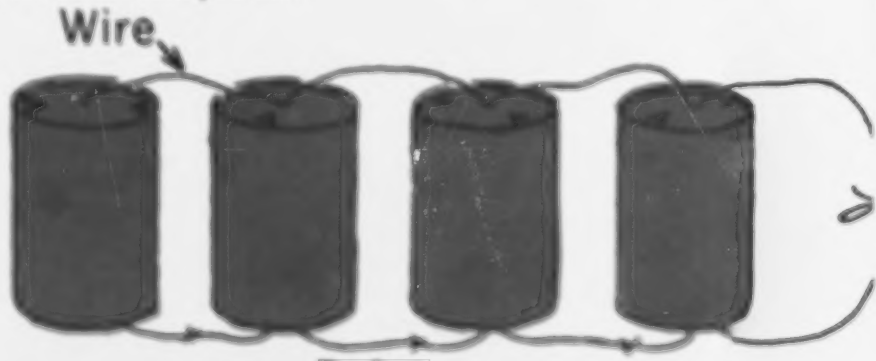
Paint them with enamel, if possible.

Take an empty coffee can with a cover. Punch holes evenly around the bottom with a punch-type can opener. Put the cover on and paint the whole can with enamel so that the coat of paint holds the cover in place. This makes a fine container for scissors.



Rolling Pull Toys (for toddlers)

Old beer cans make a fine toy. Punch a hole with a nail in the middle of each end. Push wire through and twist to make a loop fastening two cans together. Repeat for all the cans you use.



Buckets

Punch two holes, one on either side of the upper edge. Tie in rope for a handle.

Sand Toys

Cans of all sizes make fine toys for the sand box, just as they are.

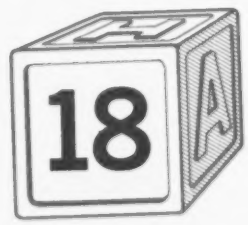
Stilts

Take two large cans. In each can, punch two holes near the solid end, on opposite sides of the can. Thread heavy string through the holes and tie the ends so the

string won't slip out. The child takes a loop of string in each hand and walks on the cans. Tin can races are fun.

Telephones

Take two empty cans and punch a hole in the solid end of each. Thread through and knot a rather heavy string so that it will not slip out. One child talks into his can while the other listens to his own can. The string should be pulled taut. The sound waves travel along the string.



Cooking

Cooking is a basic skill. Learning something about measuring, preparing foods and cooking them will be useful all one's life. Let small groups of the older children—boys and girls—help with meals for the Center, and also let them cook as an activity. They will love it and nothing could be better for them.

It is a good idea for the grownup to assemble on a table all the ingredients and utensils that will be needed before starting. Let the children do as much measuring, pouring, stirring, etc., as possible. Make sure they understand the order of the steps in a recipe. Of course, this needs careful supervision. Have only a small group of children working at once. Talk over with them ahead of time what they will be doing.

Older children should be helped to start a collection of recipes. They can make a simple notebook to keep these in. This will be really useful for them to have—it will help them remember the recipes and, at the same time, will give them an incentive to read and to write. The recipes should be neatly printed or written. The grownup will have to see that they are copied accurately. Children who are not used to writing make many mistakes.

In a simple way, the cooking lessons can be used to teach children how to prepare foods properly, and what foods are good for them. Disadvantaged children have very little knowledge of well-balanced diets. Even a little help in this direction may really be of value to the child's whole family.

Things Children Should Know

These are common utensils:

cup	egg beater
teaspoon	strainer
tablespoon	flour sifter

Be sure children always rotate the handle in the same direction.

Measuring

Measurements given are almost always level (even with the top of the spoon or cup). Use a knife to level off ingredients in your spoon or cup.

Creaming

Means beating shortening till it is fluffy.

Blending

Means mixing two or more ingredients very thoroughly.

Greasing

Use a piece of waxed paper dipped in shortening to grease cookie tins. Then cookies and cakes won't stick. *Always keep pot handles turned to the side when they are on the fire so you won't knock over the pot and get burned.*

Some Useful Recipes

Vanilla Cookies

You Will Need:

- 3 cups of sifted all-purpose flour
- ½ teaspoon salt
- ½ teaspoon baking powder
- ⅔ cup of shortening
- ⅔ cup of sugar
- 2 eggs
- ½ teaspoon vanilla
- 3 tablespoons milk

1. Sift flour, salt, and baking powder together in a bowl.
2. In another bowl cream the shortening and add the the sugar.
3. Stir in unbeaten eggs, vanilla, and flour mixture till smooth.
4. Add milk and press dough into a firm roll.
5. Chill the dough in the refrigerator for at least an hour.
6. When the dough is firm, roll it out flat on a lightly floured board until it is ¼ inch thick. Roll only a little at a time.
7. Cut out cookies, using cookie cutters or the rim of a glass.
8. Place cookies on a greased cookie tin.
9. Bake them in a moderately hot oven (375 degrees) for seven or eight minutes.
10. Take them out of the oven and let them cool. (They are pretty with frosting decorations.)

Oatmeal Cookies

You Will Need:

- ½ cup of butter
- ⅔ cup of sugar
- 2 eggs
- ¼ cup of milk
- 1 cup flour
- 1 teaspoon baking powder
- ½ teaspoon salt
- 1 teaspoon cinnamon
- 1 cup oatmeal

1. Mix the butter and sugar—add the eggs and milk.
2. Add the flour, baking powder, salt, cinnamon, sifted together.
3. Add the oatmeal.
4. Drop from a spoon onto a greased cookie tin.
5. Bake 20 minutes in a 350 degree oven.

Frozen "Pops"

Good on very hot days. Mix powdered drink mix with water, adding sugar to taste. Pour into paper cups or into an ice cube tray. Put it in the freezer compartment of the refrigerator until solid.

Butter

Let children see how butter is made. Beat sweet cream (kept at room temperature) with an egg beater till the cream turns to butter. Wash butter in cold water. Spread on crackers.

Train children to always wash their hands before they touch food. Have them put on a clean apron or smock or, if this is not possible, at least put a clean piece of cloth over their ordinary clothes. Perhaps the girls can sew aprons for themselves.

Teach them, also, that cleaning up—mopping up spills as soon as they happen, washing the pans and other utensils they have used, and putting extra food away—is an essential part of the job.

Here are more suggestions for cooking experiences:

Cereal

Prepare a quick-cooking cereal for supper some evening.

Cocoa

Hot cocoa on a cold day is fun to drink. Use the recipe on the package. Put a marshmallow on top of the cocoa in each cup.

Puddings

Chocolate pudding, vanilla pudding, fruit flavored gelatin and other packaged desserts can be made by following the recipes on the box.

Cookies, Cakes, Muffins

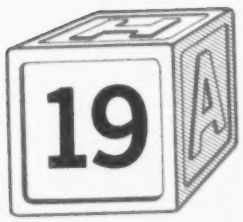
Use the various packaged mixes for almost foolproof results. Follow the recipe on the box.

Raw Vegetables For Salad

Scrape and cut raw carrots into carrot sticks. Clean celery, cut off the extra leaves and wash it. Open up, wash, and cut up lettuce or cabbage heads.

Popcorn

Buy a can of raw popcorn. Pop it in a heavy pan with the lid on tight. Put a little grease in the bottom of the pan. Cover the bottom with popcorn. Shake the pan gently as the popcorn cooks over a low flame. Add butter and salt to taste when it is done.



Science

Science for young children is something happening right around them, with and to the things they know. The child is learning about the world. He is learning about it by feeling, looking, hearing, smelling, tasting. He has great curiosity and wants to learn. It's not so much the names of things he wants to learn, he's not much interested in those. He wants to get the feel of what it does, how it works, what happens when, and, he may wonder, Why?

He needs to use all his senses to observe. He needs to do a lot of observing before he reaches the stage of answering questions. And he needs to reach that stage himself—not have the grownups try to answer his questions before he is ready to ask them.

This makes it difficult in some ways, because the grownups must be able to stand back and wait. They must be willing to give the child many chances to explore and to find out things for himself, in his own way, through his own eyes and ears and fingers, not just through words. But it makes it easy, too, because the grownup doesn't have to be a walking book of answers. He doesn't have to know a great many facts himself. All that is required—and it is so important—is to be interested along with the child, to look and listen with him, and to give him the raw material to explore—rocks, magnets, flowers, insects, etc.

Following are some suggestions for science experiences. There are some ideas for experiments, for collections, and for a more grownup approach to science for the older, school-age children. The most important point is the simple utilization of what is found in and around any Center. In this way the children are always experiencing what happens with the common things right at their feet and near their hands, and experiencing them in their own way.

Where does science fit into the program of the Center? Anywhere the children are, anywhere they see something that interests them. It's good to have a special science corner to keep things they find and things you may put out for them to explore. The table might hold a few cans and jars, perhaps a homemade cage for a pet and a bulletin board for pictures, or an interesting leaf. But science doesn't just happen here. It happens in the children's minds, wherever they are playing and experiencing the world around them.

When should we study science? Any time the subject arises naturally. Take the fleeting questions, "Why is that cloud so low and dark?" "What makes the stars shine at night?" "Why is water hot when it boils?" and put them to work. This doesn't mean giving the answer. That isn't putting the questions to work. It means giving the children more chances to use their senses, to see for themselves what happens. It may mean talking about it, it may mean for older children a simple experiment, but it may also mean something as simple as just repeating the questions so that the children realize that here is something to notice and to wonder about for themselves.

If the child is told, "A dark cloud sometimes means a storm," that is all right as far as it goes, but it doesn't go very far. But, if he has his eyes raised to the heavens through the interest aroused in that one low cloud, so that he notices and thinks about other clouds and other things he sees in the sky, then his interest has become creative and his whole life is richer and more interesting.

Who studies science? Everyone who lives and breathes and is alive is experiencing science all the time. Even the youngest children are unconsciously learning about their world.

How can I stimulate it? By being quick to follow the natural leads of the children's questions; by answering, when you can and when an answer seems called for, very simply (tell the children less than you think they want to know—they will ask more if they want to know more), by having materials around and, for the older ones, by planning some regular activities which may get the children started. Don't establish a hard and fast program. Instead, plan a few activities to prime the pump of interest and get the children started.

Here are some experiences for the younger children.

Touching Things

Place materials on a tray or in a box. Gather the children around—a small group at a time—and, as you take up each piece, touch it gently with your fingertip. Show the children, not with words, but by the way you do it, that you are getting the feel of the object. Ask

about it freely: "Does it feel smooth or rough, pleasant or unpleasant?" The names of the materials don't matter much. Leave the materials where the children can handle them as they wish.

Some materials: sandpaper, velvet, cotton, pebbles, fur, leather, cork, wood, cellophane, burlap, sponge, knitted material, flannel, satin, bark, cake of soap.

Playing With Water

The sink in the playhouse corner will give children a great deal of experience with water play. Let them make soap suds and use an egg beater to whirl up the mass of suds. Let them pour and measure water and float small pieces of wood in it to represent boats. Fill a big basin or tub with water for them.

What will float? Try large pebbles, buttons, corks, paper, nails, heavy cardboard, wood.

How does the surface of the water change
- when you blow on it or fan it?
- when you add soap and make suds?
- when you drop a pebble in it?
- when you drizzle drops on it?

How can you get water from one pan to another? If a rubber tube can be found, children can experiment with a simple siphon. To make a siphon work, first fill it full of water. Put one end in a high pan and the other in a lower pan. Water will flow from one to the other as long as the siphon is full of water.

How can you make water move into something you hold? Try an old medicine dropper, a rubber ball with a hole in it, a rubber bulb clothes sprinkler, a sponge.

Let children play with clay, dough, wet sand or mud to learn how things feel and work when they are wet and pliable and how they change when they dry.

Let them blow soap bubbles and watch the light shine on the surface and hear how the bubbles "pop" when they break.

What happens when water runs off soil? After a rainstorm let the children watch the rainwater digging channels, moving pebbles.

Playing with Salt

Salt is a dry but "fluid" substance. Rice or dry sand can also be used. This is a "feeling" experience. Children enjoy handling the salt, letting it slide through their fingers, pouring it, making it come through a funnel or down a cardboard slide.

Materials:
- Pan or carton—at least 18 by 12 inches and 6 to 8 inches deep.
- Coarse kitchen salt (or rice or sand)
- Sieve, funnels, cups, cans, scoop or spoons, small dry cereal boxes, rubber tubing
- A cardboard slide made out of a narrow box

The Weather

For the littlest ones, weather can be explained at a very simple level—going for a walk on a windy day so that their clothes blow back against their bodies; standing briefly in the rain to feel the drops; noticing the heat of the sun on their shoulders at noon.

Suggested activities: Tying a strip of cloth to a branch outside to see when it waves wildly and when it hangs still. Walking from a shadowed place into the sunshine to feel the difference in heat.

Nature

All living, growing things around the Center—and the inanimate ones, like pebbles, big rocks, puddles, brooks, the sky—are your raw materials. Encourage the children to experience, to notice, and to enjoy the natural world in which they find themselves.

Nature is a great basis for simple science lessons. It encourages children to see and gain sympathy for, as well as knowledge about, the lives of the creatures they see all around them. Help them to keep an open mind and to ask many why's about the natural processes occurring everywhere.

Observing Living Creatures

If your center is anywhere near a pond, use large glass jars as aquaria (see Figure 17). Fill them with pond water. You may get pollywogs (small ones turn into toads, bigger ones are bullfrog pollywogs and take two years to grow) or small frogs. If you are lucky you may find a pollywog on its way to turning into a frog—watch the tail grow smaller as the four legs develop. You may find water held up by the surface of the water itself. There may be a tiny fish, various kinds of eggs of water creatures, mosquito wrigglers, larvae of the dragon fly, and many other creatures. You won't know them all, but it doesn't matter. Do not put too many creatures into one jar. They must live in their own pond water. Put in some plants, too. The water from the faucet of the Center will kill them, but in their own pond water there are tiny bits of floating food which will keep some of them alive for days. Watch them, then put them back and get more. It is poor training for the children to keep pets which will die in captivity, but for a few days a big glass jar can be a good home for pond creatures.

Keep a frog for a few days in a jar partly filled with water. He will get enough food for a little while from the pond water itself, but he can be fed live flies also. Give him a big rock to rest on while he is

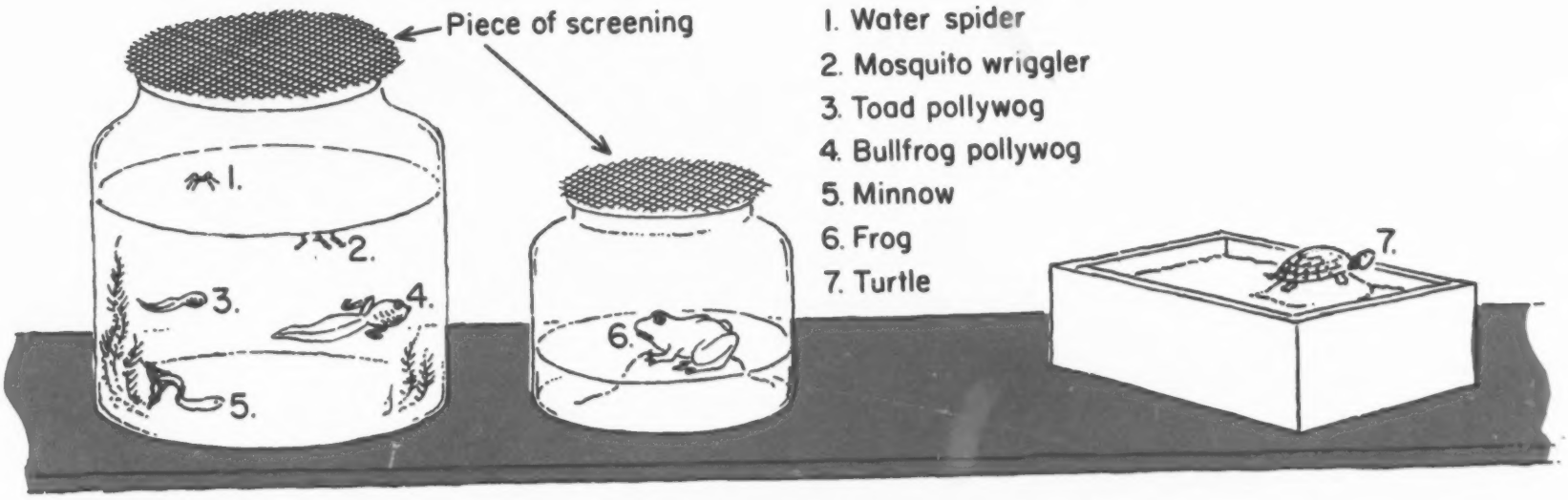


Figure 17

out of the water. Cover the top with a heavy piece of screen, tied down so he won't jump out. Notice his webbed feet with the suction cup toes, his big eyes, his powerful kick. Let him go again while he is still healthy.

Keep a toad, also in a jar, but with soft, moist earth and leaves in the bottom of the jar. Toads must be able to keep their skin moist. Never leave them in the sun. Hold him yourself first to show the children that a toad does not give warts (simple observation can help children to see that some things they have been told are not really true, and that they need not be afraid of many animals).

If you find a small turtle, he makes an easy-to-keep pet. He needs a box filled with damp earth and a dish of water in which he can swim (Figure 17). Feed him small scraps of raw meat, flies, or turtle food from the variety store if he is very small. Many turtles must eat their food from the surface of the water dish. He may not eat every day. Remove what he doesn't eat so it won't spoil. Turtles are hatched from soft, leathery eggs buried by the mother in damp sand. (Don't try to make a pet of a snapping turtle—he bites. He is usually quite large, with a heavy, parrot-like beak and a long tail.)

Using a glass jar with black paper wrapped around it as a home for earthworms. Take off the paper to watch the worms. Put a little damp earth and some crumpled leaves into the bottom of the jar—dead leaves are best if you can find them. Collect two or three earthworms. They will come out of the soil and be easy to find after a rain. Notice their shape—long and thin, with a bulge about a third of the way from one end. The bulge is the egg case. Earthworms travel by stretching themselves out and then pulling themselves ahead. Watch them do this. Children will be interested to know that without earthworms no life could exist. They dig tunnels through the soil constantly, giving plants air for their roots and turning waste materials into good earth. They help make the loam and rich earth. They are always eating their way under the ground. Earthworms have no eyes, but are sensitive to light along their bodies, particularly at the tip ends. This doesn't mean they can see anything sharply, but it does mean that they sense when they have come to the surface. Keep the worms for a few days, remembering that they must stay moist, for they dry out almost right away if they get heated or if the earth loses its moisture, and then they die.

You may be lucky enough to have a small mammal for a pet—a baby squirrel or a rabbit, or a kitten. Tiny fur-bearing animals can be fed milk several times a day from a medicine dropper. They are ready for solid foods when their teeth start to come in. Let the wild ones go when they have grown, or find a home for a kitten.

It is wonderful for children to have a pet. But they must be helped to learn, gently but firmly, that baby animals must be treated with care. They must not be touched very much, must not be squeezed hard, and must be fed regularly and kept in a clean, dry home. It is wrong to allow children to be cruel or thoughtless with a pet, even though they may not realize what they are doing. The basic responsibility has to be given to the adults. Don't take on this kind of responsibility unless you will look after the animal every day.

Insects are easier creatures to keep in a Center, because they will do most of the work of caring for themselves. Watch a caterpillar change its skin. It must do this several times, perhaps as many as 10 times before it is ready to spin a cocoon and go into its next stage. If you see a caterpillar crawling along a branch, bring it into the Center, together with many fresh leaves from the plant on which you found it. These leaves are the caterpillar's chosen food and it needs lots of them. It will eat and eat, then will seem to stiffen and stretch. After a while its skin splits along its back and out comes the same caterpillar, next larger size, perhaps a different color. This happens because the caterpillar's skin can't stretch. As it grows within its skin, it gets to the point where the skin is just too tight. Then, a change is needed.

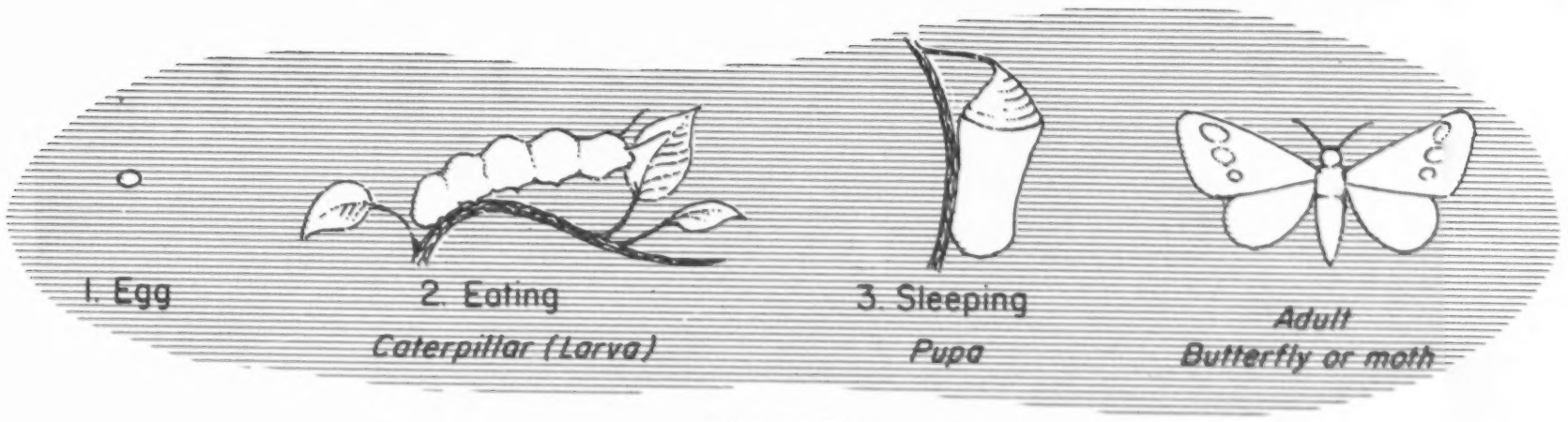


Figure 18

After the caterpillar has split its skin, or molted, for the last time, it spins a cocoon and goes to sleep within it. You may be lucky enough to see a butterfly or moth come out of the cocoon after a while. Don't worry if its wings seem small and crumpled at first. They will stretch out and get larger as they dry. This is a wonderful thing for children to watch—one of the real miracles of life.

A cricket or a grasshopper lives happily as a pet, and it's easy to make a home for it. Get a flowerpot with a small, green-leaved plant growing in it. Put a large lamp chimney over the plant, working its base down into the soil of the pot. Put the plant on a saucer and keep it watered. The water coming up through the leaves of the plant will supply the cricket or grasshopper with plenty of moisture and it can nibble away at the leaves for a long time without doing any damage. From time to time you can give the insect a bit of apple, but take away what it doesn't eat before the fruit starts to spoil. The slanted glass of the lamp chimney will keep the cricket from jumping out of the cage, but it gets plenty of air and sun and will chirp away cheerfully.

Crickets and grasshoppers are large enough so that children can see the different parts of an insect's body. Every insect has three sections—the head, with the eyes and the feelers; the central section, from which protrude six legs and two pairs of wings—and the abdomen, through which the insect breathes through a row of little holes. These can be seen on a large grasshopper without any magnification. It is fun to look for these parts. Watch a grasshopper push itself off with its huge jumping legs, and walk daintily on its smaller legs. Watch the cricket play tunes on its hard wing cases with its back legs.

Gardens And Plants

Here are some easy ways children can grow plats:

Take the tops of root vegetables, such as carrots, bets, or white turnips. Leave the leafy part attached tothe end of the vegetable. Place the stub in a shallow ish of pebbles and water. If you keep it wet and in a l̥ht place, new shoots will appear within a few days.

Place a sweet potato in a jar or a tall glass so iat just its tip is in water. You can put toothpicks throgh it so it won't slip down. In about two weeks sprats will appear and a beautiful vine will grow from he sprouts. Attach strings to the wall on which the vies can climb. A sunny window is the best location for yur sweet potato vine.

You can start a tiny orchard. Place seeds from lems or grapefruit between two layers of moist paper tows. Keep the towels damp. In three to four weeks sprts will appear. Now transplant your little sprouts to cole cans filled with earth and water them regularly.

You can grow a tiny green forest by placing leil beans in a layer on a saucer. Add enough water o moisten them but not enough to float the seeds. In abt ten days little green sprouts will appear.

Make a lawn by sowing grass seed in a sponge al keeping it moist—not wet—until the green shoots appe.

Make an egg shell garden. Save egg shells and cut f their tops. Plant a single quick-growing seed in ea egg shell (nasturtium seeds grow fast) and set the e shells, filled with earth, in sand or clay.

Plant radish seeds outdoors in a sunny garden ea in the summer and let the children eat their own radish after three or four weeks. Thin them or the roots wo round out.

Large beans, placed on damp cotton, will spro quickly and children can see what a baby plant's fi leaves and first roots look like.

School-age children may be interested in lowing t names of a few flowers growing around the Cam Perhaps they will be interested in picking bunches common flowers like daisies and arranging them so the are gay and pretty. They can use big cans, jars, mi bottles, or jelly glasses as vases.

Some children may want to collect wildflowers and see how many kinds they can find. Flowers can be pressed for several days in newspaper under a pile of books, bricks, or anything flat. They can be mounted with cellophane tape on sheets of construction paper and tacked on the bulletin board in the science corner.

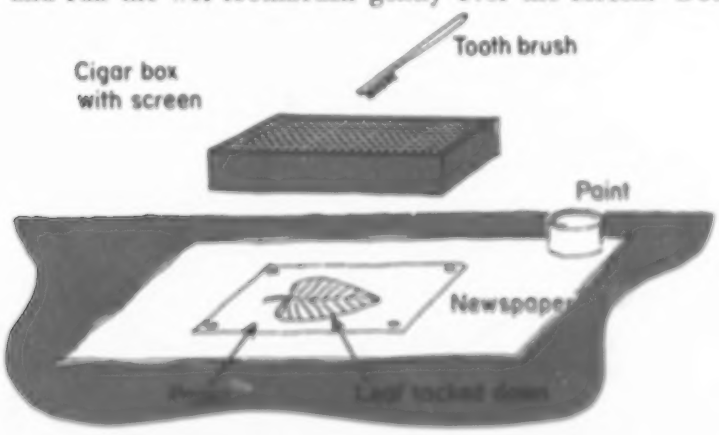
Even though no one may know the names of all the flowers, children can notice such things as number of petals, shape of leaf, thickness of stem, and size of flower, so they will recognize old friends when they see them again. In what sort of place does this plant grow? In a damp shady spot, in a sunny field, on a rocky slope? What types of insects visit it? What time of day does it open? All these and many more questions can be answered through observation, whether or not the name of the flower is known.

In the same way, children can notice the trees growing around the Center. Which ones are straight and tall? Which ones bend in the wind? What are the shapes of the branches?

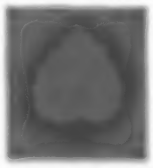
Leaves

A good way to learn to notice the shapes of leaves is to make spatter prints of them. Here's how:

Press leaves flat between sheets of newspaper. Find some thick poster paint, an old toothbrush, some screening or mosquito netting tacked to an old cigar box (or other wooden box) with the bottom out. Tack the leaf to a sheet of paper. Hold the screening over the leaf, dip the toothbrush in the paint, shake off big drops, and rub the wet toothbrush gently over the screen. Dots



of paint will fly over the paper. Move the screening and brush so the paint covers the paper evenly. Let everything dry, then untack the leaf. Its shape remains clear, surrounded by the outline of paint.



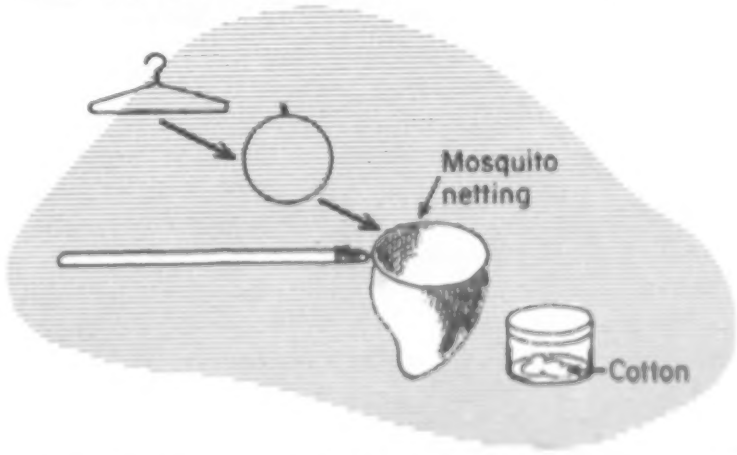
This is fun for children. They love to see the leaf shape appear, and they learn about leaves at the same time.

Collections

Some of the school-age children may want to collect things. Many children love to assemble lots of objects and arrange them and look at them. Some natural objects lend themselves well to collecting. Among these are pressed flowers, leaves, or prints of leaves.

Rocks: Even though no one at your Center may know the names of the kinds of stones found nearby, the children can still learn many interesting things about rocks. What colors and shapes can they find? Which stones are harder and which softer? Which ones crumble easily? Which split into flat sheets?

Many Centers are in areas where there are a great many fossils. Fossils are the hardened remains or the ancient prints of prehistoric animals and plants embedded in rock. Even though a child may not know much about a fossil, it may give him a wonderful feeling to realize that in his hands he holds a trace of something that lived long, long ago, before men were on the earth.



Insects: There are hundreds of kinds of insects around any Center, so it is quite easy to start a collection. You will need:

A Net—made from a wire coat hanger bent in a circle and tied with heavy string to a long stick. Make a net from old mosquito netting and sew it to the coat hanger.

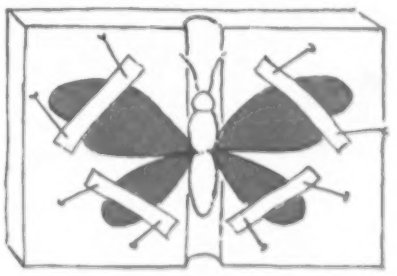
A Killing Jar—put a little cleaning fluid in a screw-top jar with a wide mouth. Cover the bottom of the jar with cotton. When you catch an insect, put it in the jar. This will kill it quickly and painlessly and is far kinder than sticking the insect with a pin. *Do not inhale the fumes from the cleaning fluid.*

A Mounting Board—when the insect in the killing jar is dead, but before it stiffens, place it flat on the board (make a little groove in the board to hold the body) and pin strips of paper over its wings so they will dry stretched out flat. Don't pin the wings. This should only be done for big insects, such as butterflies and moths.

Some Straight Pins (rustproof).

A Small Wooden Box to hold the collection. A cigar box is just the right size. Cover the bottom of the box with cotton.

After the insect has dried, hold it firmly and stick a pin through the center of its back. Mount it on the cotton in the box. Tiny insects can be stuck to a piece of stiff paper with a drop of glue. The paper can then be pinned in the collection box.



Insect on a mounting board.
Strips of paper hold wings.

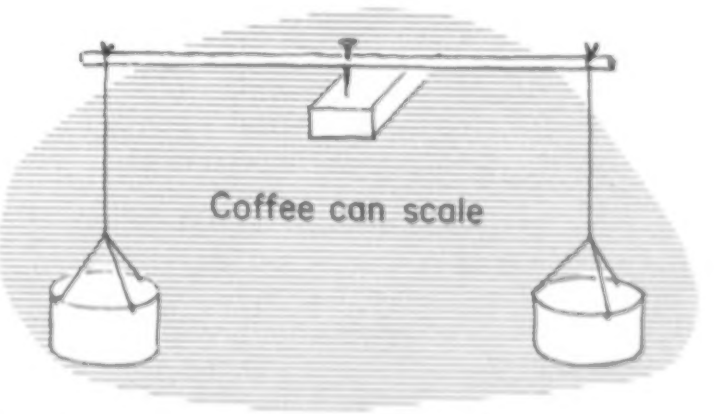
Keep the box covered most of the time so it won't get dusty.

Put a few moth balls in it to keep away beetles that might eat the bugs.

How Things Work

Magnets: Get a couple of little magnets from a variety store. Let the children see which things are pulled by magnets and which are not. Gather together odds and ends—nails, a crayon, a bit of chalk, paper, pins, a brass screw—and let the children try them all. They will play with the magnets again and again. The older children will soon learn that a magnet pulls iron and steel; the little ones merely need know that some things work and some don't. With two magnets, the older children can learn that held one way, two magnets pull each other, but that held the opposite way, one magnet will push away the other.

Simple Machines: Make a scale. Let the children use it to weigh things, perhaps in their house or store play. Take two empty coffee cans. Make three holes an equal distance apart around the rim. Attach string through each and tie the three strings together so the can hangs levelly. Fasten each group of short strings to a longer one, and then in turn to a straight stick which has a nail driven through its exact middle. This will work very effectively.



Examine the common tools and implements around the Center to see how they work. This can be done first in a group, where the members talk about each tool as they see it work. Later the children should be allowed to use all the implements themselves.

Suggested tools include: door latch, pulley, old alarm clock, bell, egg beater, flour sifter, rolling pin, pry bar, claw hammer, scissors, paper punch, bottle opener, screwdriver, screen door spring, tongs, broom.

What Heat Does: Take an ice cube and put it in the sunshine. First it turns to water, and then the water disappears. Where has it gone? Talk about this with the children. The older ones can learn the terms "solid," "liquid," and "gas" and can learn that many things go through these three stages.

What Makes Sound Travel? Feel the vibration of a drum head, comb, throat, etc. The simple toy telephone made from tin cans and string (described earlier) is a good way for children to experiment with sound. Let them listen through other things—a broomstick, for example. They will find that they can hear the tick of a watch better through the broomstick than through the air.

What Air Is

Probably the best way to study wind is to observe the trees bending in the wind, to feel the breeze against one's body. Older children may be interested in a few very simple experiments.

How can we show that air exists? Take a large lightweight cardboard box with a cover (like a shoe box). Cut a hole in one end. As the children press down on the top, they can feel the air coming out if they put their hands over the hole. Something must be inside, even though one can see nothing.

Children can see that air holds things up by making and playing with simple parachutes, made by tying together the four corners of a big handkerchief or a scarf. Tie a pebble to the middle of the knotted corners, to act as a weight and a balance. The children can call the pebble the "man" parachuting down. Throw the little

pilot and his parachute up into the air and let them float down.

Kites, too, show children that air is a real thing that supports and pulls objects. The strain of a strongly blowing kite against a child's hands and arms lets him feel the strength of the air all through his body.

How can we show that air pushes down on us, everywhere? Let children experiment with sucking water through straws. What makes the liquid travel up the straw?

The older children can begin to figure out why a siphon works. Let them experiment with it.

Here's a simple experiment which works very well. An adult should perform it, because it involves fire. Place a candle upright on the bottom of a pie plate. Fill the pie plate with an inch or so of water (colored water is easier to see, so add drop of ink) and light the candle. Set over it a dry, empty quart bottle with its rim in the water. As the flame of the candle burns away the oxygen inside the bottle, the water from the pie plate is pushed up to take its place, rising inside the bottle and surrounding the candle. Help the children to see what is pushing the water up and, also, why there is now a space inside the bottle, for this tells them still another thing about air.

More About The Weather

Encourage children to notice the clouds, to see what kind of weather comes with the different varieties. There will be the tiny, fluffy fair weather clouds; the big, dark thunderheads just before a storm; the striped "mackerel sky" which often means that rain is coming in a few hours; the solid, gray overcast of a stormy day—these and many other formations can be observed.

Sometimes a group of older children will enjoy making a cloud chart. They can use blue or gray construction paper for background and make the clouds of glued-on cotton. They can make differently shaped clouds. They can write a few words describing the weather that comes with each kind of cloud.

Even younger school-age children can keep a weather chart. It is very good for improving their ability to read a calendar. Get a big, plain calendar. Your grocery store or bank may have one. Children can keep a record of each day. They can draw an orange sun for a sunny day, for instance, or raindrops for a rainy one. Black clouds can mark a thunderstorm. Perhaps they can write down on the calendar whether it is windy or calm, hot or cold. If they get in the habit of filling it out each day (toward afternoon, when they have a good idea of the weather) they will soon have an interesting record, and will have learned to observe things around them more carefully.

Sun, Moon, Stars

Encourage children to notice the direction and length of the shadows in early morning, at noon, and in late afternoon.

Notice the shape of the moon when it can be seen.

If the older children seem to be interested, you can discuss with them in a very simple way what makes a day (the Earth turning once on its axis); a month (the moon going around the Earth once), and a year (the Earth going around the sun once). You can use an orange for the sun, a cherry for the Earth, and a tiny berry for the moon, or the children can act out the movements of the Earth, moon and sun.

They can learn that the sun is very hot and very, very big and a long, long way from the Earth. The exact sizes and numbers of miles are not important, but it is a good thing for the children to realize the basic facts about the Earth, moon, and sun in relation to each other.

There are infinitely more things that can be done and experimented with simple science—these few may have given you some ideas and a start. Don't be afraid to try things on your own, all sorts of things. Just learn what interests the children and go on from there.

Group Games

Hide the Thimble—Children choose an object to be hidden and a child to be "it." "It" leaves the room or is blindfolded, and one child hides the object. "It" returns and children help him by clapping loudly when he is near the object and softly when he is far away from the object. "It" and the child hiding the object

both choose someone to take their places after the object has been found.

Huntsman: Choose a leader and have him march around in any way he wishes. He says "Who would like to go with me to hunt ducks?" or bears, rabbits, etc. All the players fall in line behind him and march as he does. When the leader sees that all are in line and away from their seats he calls "Bang" and all scamper for their own seats; the first one seated may be leader the next time.

Advancing Statues: Divide players into two equal groups on opposite sides of the playing space with the leader in between. Each player is a live player when leader is not looking at him but must be immovable when the leader looks at him. The players from one side advance toward the leader when he is looking the other way and he sends anyone back if he sees him moving. The side that first reaches the center wins.

Animal Chase: Mark off two bases in different parts of the play area. One base is near the trainer. All the players are named for animals (i.e., lions, tigers, elephants, etc.). Several players will have the same name. The trainer calls the name of any animal he chooses and all the players with that name run to the other base, the trainer trying to catch them. Any player caught before reaching the other base must change places with the trainer. The game continues until all the animals have been called. The trainer then goes to the base where the players are not standing and the game is repeated.

Cat and Rat: Circle formation. A cat and rat are chosen. The cat steps outside the circle, the rat stays in the middle. The children in the circle hold hands tightly, and by moving them high or low help the rat from being caught by the cat. If the cat gets inside the circle, the rat quickly gets outside. When the cat catches the rat, each chooses a new player to take his place.

Simon Says: All players face one of their number who is the leader. The one who is leader assumes any gymnastic position or performs an action at the same time saying, "Simon says do this." The others immediately imitate him. Should the leader at any time say "Do this," instead of "Simon says do this," any player who imitates the action performed must be seated. The last person standing is the leader next time. The leader must say "Simon says" or the children should not follow his lead.

Tin Can Relay: Equal number of players in two or three rows (depending upon the number of children). Place a tin can on the floor beside each child who is at the beginning of a row. At a signal each child at the beginning of the rows picks up the tin can, passes it from one hand to the other above his head and puts it down on the floor on the other side of him. The next child in line picks up the can and repeats the actions. The row that gets the can to the other end of the line first wins the game.

The Lost Child: This is a quiet game designed to test the memory and it makes an interesting variation when players are tired of active games. The players are all seated with the exception of one who is sent from the room. When this player is well out of sight and hearing, the leader beckons one of the players, who leaves the group and hides. The rest of the players then change their seats and the one who is out of the room is called back and tries to tell which player is hidden. When successful, this first guesser may be seated and another child chosen to guess.

Steal The Bacon: The players line up in two equal rows. Each row numbers off from one. There are two ones, two twos, etc. In the center between the rows is an object. The leader calls one of the numbers, for example, "Three!" Both the threes run up and stand on either side of the object, looking at each other. The point of the game is for one player to grab the object and take it back to his line without being tagged by the other. If one player does this, he wins. But if he is tagged before he gets back, the other side wins.

Stories

Books should be displayed within easy reach of the children, so that the books look attractive and interesting. Use a shelf or make a simple book rack. All children enjoy listening to stories and looking at pictures. Story time in the Center should have a regular place in the program. The period should be very informal, with the children feeling that they are a part of the experience. Choose a story which is appropriate for the children's age and level of interest. After selecting it, read it over two or three times so that it is familiar to you before

it is presented to the children. Stimulate the children's interest in the stories and books. A good time for reading or story telling is after washup and before dinner.

Five to eight children are a large enough group to start with. Be certain that the children are seated comfortably, perhaps on the grass in the playground, or on rugs in the playroom, or on chairs, if possible. Children seated on chairs generally pay better attention and have fewer distractions. It is a good idea to have all toys and other books away from the group. When the children are seated on chairs, the adult should also be seated on a small chair in the group and should hold the book so that all the children can easily see the pictures. Wait a minute or two for the children to quiet and prepare themselves to listen. Before starting, the adult may tell what the story is about—cats or dogs or farms. Before beginning to read she should allow the children to talk about the subjects as it relates to their own experiences. When the children are ready for it, she can tell or read the story, keeping in mind the following:

1. Use a clear, soft voice.
2. Speak slowly and distinctly.
3. Be enthusiastic about the story and give it a dramatic quality.
4. Be sure that the children can see the pictures.
5. Watch for inattention or fatigue. When this is evident, instead of reading each word, show the pictures and tell the story in your own way.
6. If possible, allow the children to take part. For example, to repeat any phrases or rhythmic words.
7. All of the children do not need to listen to the story.
8. If a child leaves the group, do not stop. Give your attention to the remaining children.

Remember that children have favorite stories that can be repeated many times. Books and stories should never be associated with punishment. Story time should be fun every day and an extra story may be an incentive.

Special Activities

Special events enrich and add variety to the program. These include such things as group games, informal plays, and skits for older children. Picnics, potato races, soap bubble parties, treasure hunts, jump rope contests, dancing, cooking of such simple things as applesauce, popcorn and fudge, and birthday parties, all add great enjoyment. Short trips, carefully planned in advance, should be taken to farms, brooks, hills, berry patches or any nearby spots which interest children.

Supplies

EASEL PAINTING
Aluminum foil
Baby food jars or frozen juice cans
Cellulose sponges or rags
Large brushes—one for each color paint
Large cans
Paint (powdered)
Paper (large sheets)
Smock for each child (old shirts or blouses will do)
Thumbtacks or paper clamps
Wall easels or pieces of beaverboard or cardboard

FINGER PAINT
Cooking starch
Dry wallpaper paste
Glazed paper (can be rolls of shelving paper cut into pieces)
Iron
Jars with screw-on tops
Laundry starch
Newspapers
Oilcloth or linoleum
Pans for water
Poster paint
Shellac, spray varnish or plastic spray
Soap flakes (mild)
Talcum powder
Vegetable coloring

CRAYONS

Large, easy-to-grip crayons for young children
Thinner ones for older children

CHALK PAINTING

Colored chalk
Large brown paper bags

CLAY

Artificial snow
Birthday cake candles
Clay
Earthenware crock or similar container
Rolling pin
Sawdust
Tongue depressors

PAPER

Cardboard
Cardboard containers, i.e. ice cream containers
Colored construction paper
Crepe paper
Empty thread spools
Needles and thread
Paper plates
Rubber cement
Ruled paper
Tissue paper
Yarn scraps

BLOCKS

Wooden building blocks

WOOD

Boards (about ¾" thick and 3"-8" wide—soft wood)
"C" clamp or vise
Claw hammer
Coping or jig saw
"L" square
Nails: four-penny; roofing; finishing
Sandpaper (medium grade)
Saw (all purpose)
Screwdriver
Wooden boxes or crates

KITES

Dowels (¼")
Glue (all-purpose type)
String

CLOTH

Adhesive tape
Colored yarn
Cotton batting
Curtain rings
Emery bag
Hooks and eyes
Men's socks
Paper bags (all sizes)
Pin cushion
Rick-rack
Sewing scissors
Sewing needles (with large eyes)
Straight pins
Tape measure
Thimble (for each child)
Thread (in bright colors)
Unbleached muslin

RHYTHM BAND

Bells (small ones)
Comb
Dried beans
Fine wire
Jelly glasses
Old inner tube
Old pot covers
Old tin pie plate
Pop bottle tops (with cork lining removed)
Small pebbles
Waxed paper

TIN CANS

Can opener which does not leave jagged edges
Empty cans of all sizes

COOKING

Cookie cutters
Cookie tins
Eggbeater
Flour sifter
Measuring cups
Measuring spoons
Paper cups
Strainer

SCIENCE

Broomstick
Calendar
Candle
Cigar boxes (or other boxes of similar size with lid)
Cleaning fluid
Clothes sprinkler with rubber bulb
Coarse salt
Corks
Flower pots
Funnel
Grass seed
Glass jars (large)
Lemon or grapefruit seeds
Lentils
Magnets (small)
Medicine dropper
Mothballs
Old toothbrushes
Paper towels
Pond water
Rubber tubing
Screening or mosquito netting
Sweet potato
Wire coat hangers